

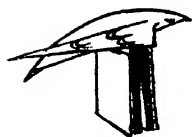
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FUNDAMENTAL PROBLEMS OF MARXISM

FUNDAMENTAL PROBLEMS OF MARXISM

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EDITOR'S PREFACE

PLEKHANOV's famous pamphlet, *Socialism and the Political Struggle*, which opened the history of revolutionary social democracy in Russia, was published in 1883. The present work, *Fundamental Problems of Marxism*, the last of Plekhanov's writings, containing a systematic exposition of dialectical materialism, appeared in 1908, a quarter of a century later.

Socialism and the Political Struggle embodied a decisive break with the time-honoured prejudices of the narodniks. To the baffled revolutionary movement it disclosed a new road, along which success, sure though slow, could be attained. It pointed out that in the actualities of Russian life there was going on a process of social and economic evolution which by degrees but persistently was sapping the foundations of the old régime. It prophesied that the Russian working class, developing with no less inevitability than capitalism, would give Russian absolutism its death-blow, and would take its place (an equal among equals) in the ranks of the international army of the proletariat.

But Plekhanov did not confine himself to criticism of the outworn theory and practice of the narodniks. In a brilliant sketch which is as valuable to-day as when it was penned, he expounded the "fundamental problems" of scientific socialism, and pointed to the method of dialectical materialism as the most trustworthy weapon in the struggle.

"What is scientific socialism? By this name we denote the communist doctrine which, in the early forties, began to emerge out of utopian socialism, under

the powerful influence of Hegelian philosophy, on the one hand, and of classical political economy, on the other; we mean the doctrine which gave the first adequate explanation of the whole course of civilisation, pitilessly demolishing the sophisms of the bourgeois theoreticians; the doctrine which 'in the panoply of all the knowledge of the century' rallied to the defence of the proletariat. Not only did this doctrine give a lucid demonstration of the inconsistencies of the adversaries of socialism; but, furthermore, when showing their mistakes, it supplied the historical explanation of these errors. Thus it was able (as Haym once said of the philosophy of Hegel) 'to harness to its triumphal car all the opinions it had refuted.'

"Just as Darwin enriched biology with the theory of the origin of species, a theory at once amazingly simple and rigidly scientific, so the founders of scientific socialism showed that in the development of the forces of production, and in the struggle of these forces against antiquated social conditions of production, there was implicit the great principle of the transformation of social species."

It must not be supposed, however, that, in recommending scientific socialism to Russian revolutionists, Plekhanov recommended it as a rule-of-thumb method or as "a definitive truth against which there was to be no appeal." He wrote: "Obviously the development of scientific socialism is not yet finished. That development cannot come to an end with the writings of Marx and Engels, any more than the theory of the origin of species can be supposed to be worked out once for all in the writings of Darwin. The establishment of the main principles of the new doctrine must be followed up by a detailed study of the subsidiary problems that arise for consideration, a study that will complete the

revolution in science brought about by the authors of the *Communist Manifesto*. The outlooks of all the branches of sociology will be amazingly widened by the adoption of these authors' new philosophical standpoint. Such a beneficial influence is already becoming manifest in the domain of the history of law and in that of the theory of primitive culture."

Plekhanov thought it expedient to emphasise the following peculiarity of the doctrine he was expounding: "Though scientific socialism derives from Kant and Hegel (among others), it is the deadly enemy of idealism. Scientific socialism hunts idealism out of its last refuge, sociology, where the positivists had given it so cordial a welcome. Scientific socialism is based upon the materialist conception of history, this meaning that it explains the spiritual history of mankind as the outcome of the development of social relations (partly influenced by the natural environment)."

Plekhanov was a man of many-sided activities. While hard at work helping in the creation of the revolutionary party of the proletariat, while applying a new method to the study of the concrete tasks of the contemporary Russian movement and investigating "the destiny of capitalism in Russia," and while simultaneously engaged in multifarious practical undertakings, Plekhanov nevertheless found time for a detailed examination of the basic problems of Marxism, concentrating more and more on the history of philosophy, civilisation and art. Furthermore, while working at the further development of the ideas of Marx and Engels, Plekhanov was busied in the defence of these ideas against various revisionists in Russia and elsewhere, against those who wanted to "supplement," "amend," or "replace" certain Marxian principles by bourgeois dogmas that were long outworn.

Plekhanov's *Fundamental Problems of Marxism* is mainly concerned with the philosophical and historical aspects of scientific socialism. For him, Marxism is a complete philosophy, a general outlook on the universe, a philosophy permeated by a single idea, one and indivisible. He protests against the attempts of Bogdanov, Lunacharsky, Bazarov and Friche to detach the historical and economic parts of Marxism from its philosophical foundation. He protests against all attempts to "provide a new basis" for Marxism by coupling it with some other philosophy, such as neo-Kantianism, Machism, empirio-criticism etc.—attempts which are usually made in response to promptings derived from some philosophical trend which happens to be in favour among bourgeois scholars.

Plekhanov held (expressing this opinion for the first time in his criticism of Bernstein) that the materialism of Marx and Engels was based upon Spinozism, after this latter had been freed by Feuerbach from its theological lumber. Like Feuerbach, the founders of scientific socialism recognised the unity, but not the identity, of thought and being. Marx's amendments to Feuerbach's philosophy consisted mainly in this, that Marx contemplated the mutual relations between object and subject from the side from which the subject is seen to assume an active role, as functional and not merely contemplative.

"By acting on nature outside himself and changing it, man simultaneously changes his own nature."

Plekhanov is right in saying that Marx was strongly influenced by Feuerbach's *Preliminary Theses on the Reform of Philosophy*, an article published in 1843, in the second volume of Arnold Ruge's *Anekdoten*, whose first volume had contained an article by Marx on the Prussian censorship.

"Thought is conditioned by existence, not existence by thought. Being is self-determined, . . . has its foundation in itself." This thesis, adds Plekhanov, is laid down by Marx as the foundation of the materialist conception of history.

The statement is not perfectly correct. Marx radically modified and supplemented Feuerbach's thesis, which is as abstract, as little historical, as the "Man" Feuerbach put in the place of "God" or of "Reason" (the Hegelian modification of "God"). "The human essence is not an abstraction inherent in the individual man," writes Marx in his *Theses on Feuerbach*. "In actual fact, this essence is the totality of social relations." Precisely because Feuerbach does not arrive at this conclusion, he is obliged "to ignore the course of historical evolution . . . and to set out from the hypothesis of the abstract, the isolated, human individual."

In accordance with his criticism of the "abstract man," Marx modifies Feuerbach's fundamental thesis as follows: "It is not the consciousness of men which determines their existence, but, conversely, it is their social existence which determines their consciousness." The basic error of all philosophical systems endeavouring to explain the relations between thought and being, is that, like Feuerbach, they have ignored the fact that "the abstract individual analysed by them really belongs to a specific form of society."

In his earliest writings, Plekhanov repeatedly emphasised the difference between the dialectical method of Marx and Engels and the vulgar theory of evolution, according to which neither nature nor history makes jumps, according to which all the changes in the world occur by a process of gradual transformation. In his criticism of Tikhomirov, who from being a revolutionist had become a reactionary, he explained once

more to the "new defender of absolutism" that sudden changes form an inevitable part of the evolutionary process. This brilliant paper on *Sudden Changes in Nature and History* is included in the present volume for two reasons: it is scarce; and Plekhanov refers to it in his *Fundamental Problems of Marxism*.

Of especial interest in the latter work are the sections in which the author shows how contemporary sociologists find it necessary (unconsciously, for the most part), in view of the extant conditions of their science, to give a materialist explanation of the phenomena they are studying. Every new discovery throwing light on the history of civilisation, of mythology or of art, supplies fresh arguments in support of the materialist conception of history. Even two decades ago, in 1908, Plekhanov could have greatly multiplied his instances of this kind drawn from bourgeois writers upon historical and sociological topics. Without realising the fact, these scientists use a terminology, assemble materials and record facts which all combine to show the soundness of the Marxian outlook.

In conclusion, a few words on the present edition of *Fundamental Problems of Marxism*. Besides the fragment on *Sudden Changes in Nature and History*, it contains an extensive excerpt from the preface written by Plekhanov for Engels' essay on Feuerbach. In accordance with Plekhanov's wishes, these remarks on *Dialectic and Logic* were included in the German translation of the *Fundamental Problems*, published in 1910. Furthermore, the notes added by Plekhanov to that edition are given here. I have myself supplemented the work by a few explanatory notes and further references. All my own contributions are signed.

D. RYAZANOV.

FUNDAMENTAL PROBLEMS OF MARXISM

MARXISM is a complete theoretical system. To put the matter in a nutshell, Marxism is contemporary materialism, the highest stage of development of that philosophy, that view of the universe, whose foundations were laid down in ancient Greece by Democritus, and in part by his predecessors, the Ionian thinkers. In fact, what is called hylozoism is nothing other than a naive materialism. The chief credit for the elaboration of contemporary materialism undoubtedly belongs to Karl Marx and his friend Friedrich Engels. The historical and economic aspects of this philosophy, that is to say of historical materialism, together with the system of views concerning the problems, the method, and the categories of political economy and concerning the economic evolution of society (in especial, of capitalist society)—for these we are almost wholly indebted to Marx and Engels. What their predecessors achieved in this domain can only be regarded as preparatory. Before Marx and Engels got to work, materials, often abundant and valuable, had been collected; but these materials had not been systematised, had not been analysed from a general outlook, and, consequently, had not been appraised or utilised as they should have been. On the other hand, what the followers of Marx and Engels in Europe and America have achieved in this domain has been nothing beyond the more or less successful study of special problems—some of them, it is true, of great importance. That is why, in many cases, when people speak of Marxism they refer only to the two before-mentioned aspects of the materialist conception of the world. This is true, not only

of the general public which is not yet competent to understand philosophical doctrines, but also of those who (both in Russia and elsewhere in the civilised world) regard themselves as faithful disciples of Marx and Engels. These two aspects are believed to be something altogether independent of "philosophical materialism," and are even regarded as something contrasted therewith.¹ Since, however, these two aspects, when forcibly detached from the totality of kindred conceptions which form their theoretical foundation, cannot hang in the void, the persons who have thus detached them naturally consider it necessary to "provide a new basis for Marxism" by founding it (quite arbitrarily, and as a rule under the influence of philosophical currents that prevail among bourgeois savants) upon this or that philosophy—upon Kant, Mach, Avenarius, Ostwald, and, of late, on Joseph Dietzgen. It is true that Dietzgen's philosophical ideas were formed quite independently of bourgeois influence; and that they are, to a considerable extent, allied to those of Marx and Engels. Nevertheless, the philosophical ideas of Marx and Engels have a far more orderly and abundant content than those of Dietzgen, so that they cannot be completed, but at most can be to some extent popularised by those of the latter. Hitherto, no one has attempted to "supplement" Marx by St. Thomas Aquinas.² Still, it may well happen that, despite the recent papal encyclical against the modernists, the Catholic world will produce a thinker capable of such a flight of fancy.

I.

The excuse ordinarily put forward for "supplementing" Marxism by one philosophy or another is that Marx and Engels never expounded their own philosophical views. This is not a very convincing reason,

and even if the statement were well-founded, that would not be a justification for replacing the philosophical views of Marx and Engels by those of the first-comer, who in many respects regards matters from an entirely different angle. But the actual fact is that we have at our disposal data entirely sufficient to give us an accurate notion of Marx's and Engels' philosophical views.*

The definitive form assumed by these views was fully expounded, although in a somewhat polemical way, in the first part of Engel's book, *Herrn Eugen Dührings Umwälzung der Wissenschaft* (known for short as *Anti-Dühring*), of which several Russian translations exist. In the same author's famous essay, *Ludwig Feuerbach und der Ausgang der klassischen deutschen Philosophie* (which I have myself translated into Russian, supplying a preface and explanatory notes), the ideas that form the philosophical basis of Marxism are set forth in a categorical manner. A short but brilliant account of the same views, as related to agnosticism, is given by Engels in his preface to the English translation of part of *Anti-Dühring* entitled *Socialism Utopian and Scientific*.³ As regards Marx, I may mention as of great importance to the understanding of the philosophical aspects of his teaching: first of all, his description of dialectical materialism as contrasted with Hegel's dialectic idealism in the preface to the second edition of the first volume of *Capital*; secondly, to various remarks made in the course of the same volume. Certain pages of Marx's *Misère de la philosophie* are also of great importance in this connection.⁴ Finally, the general development of the philosophical ideas of Marx and Engels can be

* *Marx als Philosoph*, by Ladislaus Weryho (Verigo), Berne and Leipzig, 1894, is devoted to an exposition of the philosophy of Marx and Engels, but it would be difficult to imagine a less satisfactory work.

clearly deduced from a study of their early writings, which have recently been published by F. Mehring under the title *Aus dem literarischen Nachlass von Karl Marx, Friedrich Engels und Ferdinand Lassalle* (Stuttgart, 1902).

In his doctoral dissertation, entitled *Differenz der demokratischen und epikureischen Naturphilosophie*, written when he was twenty-three years of age, Marx still discloses himself as an idealist of the Hegelian school; and the same remark applies to some of the articles reproduced by Mehring in the first volume of the *Nachlass*. But in the articles from the "Deutsch-Französische Jahrbücher" reproduced in the same volume, Marx has already adopted Feuerbach's humanist standpoint.⁵ So, at this date, has Engels, who collaborates with Marx in the "Jahrbücher." In the work entitled *Die heilige Familie, oder Kritik der kritischen Kritik*, published in 1845, and re-issued in the second volume of the *Nachlass*, Marx and Engels have made some important strides in the development of Feuerbach's philosophy. The direction in which they have been moving is shown by the eleven *Theses on Feuerbach* drafted by Marx in the spring of 1845 and published by Engels as an appendix to the before-mentioned essay on *Ludwig Feuerbach*.⁶ In a word, there is no lack of materials to throw light upon Marx's and Engels' philosophy, but those who want to use them must know how to do so, must be able to understand them. Now, present-day readers are not in a position to understand them, and, therefore, cannot make use of them.

Why is this? For various reasons. One of the chief reasons is that nowadays people are ill-informed: first, concerning the Hegelian philosophy, without a knowledge of which it is difficult to grasp Marx's

method; and, secondly, concerning the history of materialism, in default of a knowledge of which it is impossible to understand Feuerbach's teachings clearly. Feuerbach, however, was in philosophy the immediate predecessor of Marx; and from Feuerbach was derived, in great measure, the philosophical foundation of Marx's and Engels' conception of the universe.

Generally speaking, Feuerbach's "humanism" is portrayed as a very confused and vague doctrine. F. A. Lange, who has done so much to spread among the general public and the scientific world a completely erroneous idea of the essence of materialism and its history, refuses to regard Feuerbach's humanism as a materialist doctrine. Lange's example has been followed by almost all subsequent writers on Feuerbach, whether in Russia or elsewhere. P. A. Berlin, who describes Feuerbach's humanism as a sort of "bastard" materialism, has obviously been influenced by Lange.* I must admit that I do not clearly understand what F. Mehring thinks about this question, although Mehring is the chief and perhaps the only expert in philosophy among the German social democrats. On the other hand, it is obvious that Marx and Engels regarded Feuerbach as a materialist. It is true that Engels drew attention to Feuerbach's inconsistencies; but this did not prevent Engels from recognising that the basic principles of Feuerbach's philosophy were purely materialist.⁷ Nor could any one who has taken the trouble to make a careful study of Feuerbach's teachings fail to hold that view.

II.

When I say this, I am aware that I am likely to surprise many of my readers. I shall not let that pro-

* See Berlin's interesting book *Germany on the Eve of the Revolution of 1848*, St. Petersburg, 1906, pp. 228-229.

bability alarm me, for I agree with the ancient thinker who said that astonishment was the mother of philosophy. But to help my readers to overcome their astonishment and to advance a stage, I shall recommend them, above all, to ask themselves what it was that Feuerbach meant when, giving a short but characteristic sketch of his philosophical curriculum vitæ, he wrote: "God was my first thought; reason, my second; and man, my third and last." I contend that, beyond question, the problem is solved by three very significant utterances by Feuerbach. To begin with, he writes: "In the controversy between materialism and spiritualism, the affair turns . . . upon the human head. . . . As soon as we have ascertained the nature of the matter out of which the brain is made, we shall speedily attain clear views, likewise, as to all other kinds of matter, as to matter in general."* Elsewhere, he declares that his anthropology, that is to say his humanism, means only this, that man regards his own essence, his own mind, as God.† He goes on to say that Descartes himself was not alien to such an anthropological outlook.‡ What does all this mean? It means that Feuerbach took "man" as the starting point of his philosophical reasoning solely because he hoped, by setting out from man, to reach his goal sooner; and his goal was to give a sound idea of matter in general and of the relations between matter and "spirit." Here, then, we have to do with a methodological procedure whose value was conditioned by the circumstances of time and place, that is to say by the methods of reasoning in vogue

* *Ueber Spiritualismus und Materialismus, Works*, Vol. X, p. 129.

† *Works*, Vol. IV, p. 249.

‡ *Ibid.*, p. 249.

among the savants and the educated Germans, of that epoch;* but its value did not in any way depend upon a particular conception of the universe.†

The previously quoted words concerning the "human head" show that for Feuerbach, at the time when he wrote, the question as to the nature of the substance out of which the brain is made had been settled in a purely materialist sense. The same solution of the question had been adopted by Marx and Engels. It became the foundation of their own philosophy, as can be seen clearly in the before-mentioned works by Engels, *Ludwig Feuerbach* and *Anti-Dühring*. Let us proceed, therefore, to study this solution more closely, for in doing so we shall study the philosophical aspect of Marxism.

In an article published in 1842, entitled *Vorläufige Thesen zur Reform der Philosophie* (an article which, as we have seen, exercised a great deal of influence upon Marx), Feuerbach declared that : "the true relation between thought and being may be expressed as follows: being is the subject, and thought the predicate. Thought is conditioned by being, not being by thought. Being is conditioned by itself, has its basis in itself."†

Here we have a view of the relations between being and thought which was adopted by Marx and Engels and was by them made the foundation of their materialist conception of history. It was the most important outcome of the criticism of Hegelian idealism which, in its broad lines, had been made by Feuerbach himself. The general conclusions of that criticism can be

* Feuerbach himself aptly remarks that the starting-point of any philosophy is determined by the prior condition of philosophical thought.

† *Works*, Vol. II, p. 263.

summarised as follows: Feuerbach considered that the Hegelian philosophy had suppressed the contradiction between being and thought, a contradiction brought into striking relief by Kant. But, in Feuerbach's opinion, it had only suppressed this contradiction by transferring the contradiction into the interior of one of the primary elements, namely thought. According to Hegel, thought is also being: "Thought is the subject; being is the predicate."* It follows that Hegel, and the idealists in general, only suppressed the contradiction by suppressing one of its constituent elements, by suppressing the being or the existence of matter, of nature. But the suppression of one of the constituent elements of the contradiction does not mean that the contradiction is solved. "Hegel's doctrine that nature 'is postulated' by the idea, is nothing more than a translation into philosophical language of the theological doctrine according to which nature is created by God, material being by abstract or immaterial being."† This does not apply only to the absolute idealism of Hegel. Kant's transcendental idealism, according to which the outer world receives its laws from reason, instead of reason receiving its laws from the outer world, is closely akin to the theological conception according to which the divine reason dictates to the world the laws which regulate it.‡ Idealism does not and cannot establish the unity of being and thought; on the contrary, it ruptures that unity. The starting-point of the idealist philosophy (the ego as the basic philosophical principle) is utterly false. The starting-point of a true philosophy must not be the ego, but the ego and the tu, the "I" and the "you." Only from this starting-

* *Ibid.*, Vol. II, p. 261.

† *Works*, Vol. II, p. 262.

‡ *Ibid.*, p. 295.

point can we arrive at a sound understanding of the relations between thought and being, between subject and object. I am "I" for myself and simultaneously "you" for another person. I am at the same time subject and object. Furthermore, it is necessary to point out that "I" am not the abstract ego, the abstract being with which the idealist philosophy operates. I am a real being; my body is part of my essence; nay more, my body, considered as a whole, is my actual "self," my true entity. What thinks is not the abstract being, but this real being, this body. Hence, in contradistinction to what the idealists contend, the real material being is the subject, and thought is the predicate. Herein we find the only possible solution of that contradiction between being and thought against which the waves of idealism beat in vain. This solution is not arrived at by suppressing one of the elements of the contradiction. Both elements are preserved and their true unity is made manifest. "That which for me, subjectively, is a purely spiritual, immaterial, non-sensible action, is in itself, objectively, a material, sensible action."*

The reader should note that Feuerbach, when he says this, is drawing near to the outlook of Spinoza, whose philosophy he already regarded with considerable sympathy at a time when he himself had scarcely begun to break away from idealism, at the time, that is to say, when he wrote his history of modern philosophy.⁹ In 1843, in his *Grundsätze*, he remarked with much acuteness that pantheism is a theological materialism, is a negation of theology, but a negation which still professes a theological standpoint. Spinoza's inconsistency is manifested by the way in which he mixes up materialism with theology; but, this inconsistency notwithstanding, Spinoza was able to give "a sound ex-

* *Works*, Vol. II, p. 350.

position, subject to the limitations of his day, of the materialist conceptions of the modern age." Thus Feuerbach calls Spinoza "the Moses of the modern free-thinkers and materialists."* In 1847, Feuerbach asks: "What does Spinoza mean when he speaks (logically or metaphysically) of substance and (theologically) of God?" To this question Feuerbach answers, categorically: "Nothing else but nature." According to Feuerbach, the main fault of Spinozism is that "in this philosophy the sensible, anti-theological essence of nature assumes the aspect of an abstract metaphysical being." Spinoza has suppressed the dualism of God and nature, for he regards natural phenomena as the actions of God. But, for the very reason that in his view natural phenomena are the actions of God, God becomes for him a kind of being distinct from nature and one on which nature rests. God is for him subject, and nature is predicate. Philosophy, now that it has at length definitely emancipated itself from theological traditions, must rid itself of this grave defect in the Spinozist doctrine, sound though that doctrine is at bottom. "Away with this contradiction!" exclaims Feuerbach. "Not Deus sive natura, but Aut Deus aut natura. That is where the truth lies."†

Thus Feuerbach's humanism is seen to be nothing else than Spinozism which has shed its theological lumber. This Spinozism, freed from its theological lumber by Feuerbach, was the philosophy which Marx and Engels adopted when they broke away from idealism.

But the freeing of Spinozism from its theological lumber implied the disclosure of the true materialist content of Spinoza's philosophy. Consequently, the

* *Works*, Vol. II, p. 291.

† *Works*, Vol. II, p. 350.

Spinozism of Marx and Engels is materialism in its most modern form.¹⁰

Nor is this all. Thought is not the cause of being, but its consequence, or, to put the matter more precisely, its property or quality. Feuerbach said, "Folge und Eigenschaft"—its consequence and its property or quality. I feel and I think, not as a subject opposed to an object, but as a subject-object, as a real material being. And for me the object is, not only the thing which I perceive, but also the foundation, the indispensable prerequisite, of my perception. The outer world, the objective world, does not exist only outside me, but also within me, inside my own skin.¹¹ Man is only a part of nature, a part of being; that is why there can be no contradiction between his thought and his being. Space and time do not exist only as forms of thought. They are just as much forms of being. They are forms of my contemplation. But they are this solely for the reason that I am myself a being that lives in time and space, and because I only perceive and feel in so far as I am such a being. Speaking generally, the laws of being are also the laws of thought. That was how Feuerbach put the matter.* Engels said the same thing, though in other words, in his polemic against Dühring.¹² It is already obvious how much of Feuerbach's philosophy enters into the constitution of the philosophy of Marx and Engels.

If Marx began the elaboration of his materialist conception of history by a criticism of the Hegelian philosophy of right, he was only able to do so because Feuerbach had already completed his criticism of Hegel's speculative philosophy.

Even when criticising Feuerbach in the before-mentioned theses, Marx often enough develops and

* *Works*, Vol. II, p. 334, and Vol. X, pp. 184-186.

amplifies Feuerbach's ideas. Here is an instance from the domain of "gnosiology" (epistemology, the theory of cognition). According to Feuerbach, man, before thinking about the object, experiences its action on himself, contemplates it, feels it.

Marx has in view this idea of Feuerbach's when he says: "The main defect of materialism, Feuerbach's included, has hitherto been that it has only considered reality, the objective and sensible world, under the form of object, or under the form of contemplation, not as concrete human activity, not as a practical exercise, not subjectively." It is this defect of materialism, says Marx, further, which explains why Feuerbach, in his book on the *Essence of Christianity*, regards only theoretical activity as genuinely human activity. In other words, Feuerbach emphasises the view that our ego cognises an object solely by exposing itself to the action of that object;* but Marx says that our ego cognises an object by reacting upon it. Marx's view is absolutely sound. As Faust said: "In the beginning was the Deed." No doubt, in defence of Feuerbach we may point out that, even in the process of our action upon objects, we only know their qualities in proportion as they, in their turn, act on us. In both cases, thought is preceded by sensation; in both cases, we begin by becoming aware of the qualities of objects, and not until after that do we think about them. Marx never denied this. For him, what was at issue was, not the undeniable fact that sensation precedes thought, but the fact that man is led to thought mainly by the sensations which he experiences in the course of his own action on the outer world. Since this action on the outer world is forced on him by the struggle for existence, the

* "Thought," says Feuerbach, "is preceded by being; before thinking a quality, you feel it."—*Works*, Vol. II, p. 253.

theory of cognition is, in Marx's philosophical outlook, intimately connected with his materialist conception of history. It was with good reason that this same thinker who had formulated in opposition to Feuerbach the thesis we have just been discussing, wrote in the first volume of *Capital*: "By acting on nature outside himself, and changing it, man changes his own nature." The innermost significance of this utterance is only disclosed in the light of the theory of cognition formulated by Marx. We shall see by-and-by how admirably that theory is confirmed by the history of civilisation, and also by linguistic science. It must, however, be admitted that Marx's theory of cognition is directly derived from Feuerbach's. If you like, we can even say that, strictly speaking, it is Feuerbach's theory, brilliantly rectified and given a profounder meaning by Marx.

Let me add, in passing, that this brilliant rectification was suggested by the spirit of the time. The inclination to contemplate the action and reaction between the object and the subject primarily from the point of view of the active part played by the subject, was the reflexion of the state of mind which animated society in the days when Marx and Engels were forming their outlook on the universe.¹³ The revolution of 1848 was close at hand.

III.

The theory of the unity of subject and object, of thought and being, Feuerbach's theory as well as that of Marx and Engels, was also the theory of the most eminent materialists of the seventeenth and eighteenth centuries.

I have pointed out elsewhere* that Lamettrie and

* See my article, *Bernstein and Materialism*. (Plekhanov, *Works*, Vol. XI.)

"The mind will always remain an island which can only be reached from the ocean of matter by making a jump." Forel is well aware of this, but he proves conclusively that science would be impossible unless we were willing to transcend the limits of the "island." Were it otherwise," he writes, "no one would ever get beyond the psychology of his own subjectivism, and he would be compelled to doubt the existence of the outer world, including the existence of other human beings."* But such doubts are absurd.¹⁵ "Conclusions drawn by analogy, applied induction in the natural and physical sciences, a comparison of the experience derived from our five senses—all these prove the existence of the outer world and also the existence of like beings to ourselves and the existence of their psychology. In the same way, they show us that comparative psychology, the psychology of animals, and finally our own psychology would be incomprehensible to us and full of contradictions if we tried to consider it out of relation with the activity of our brain; it would, above all, conflict with the law of the conservation of energy."†

Feuerbach is not content to register the contradictions in which those who repudiate the materialist outlook are necessarily involved; he goes on to show by what road the idealists reach their "island." He says: "I am 'I' for myself and 'you' for others. But only as a sensible [that is to say a material] being, am I this. Abstract reason isolates this existence-by-itself as substance, atom, ego, God. That is why the link between existence-by-itself and existence-for-another seems to it so arbitrary. Pure thought, thought without sensual ties, is thought without any links."† This extremely important remark is connected with an analysis of that

* *Ibid.*, pp. 7 and 8.

† *Ibid.*

‡ *Works*, Vol. II, p. 322.

process of abstraction which gave birth to the Hegelian logic as an ontological doctrine.*

If Feuerbach had had access to the information made available by modern ethnology, he might have added that, historically speaking, philosophical idealism is derived from the animism of primitive races. This has been pointed out by Tylor;† and some of the historians of philosophy are beginning to take the fact into account,‡ although for the moment rather as a curious observation than as a fact endowed with considerable theoretical importance. I may, in this connection, allude to a really remarkable flash of insight on Feuerbach's part. He wrote: "The concept of the object is, primarily, nothing else than the concept of another ego. Thus in childhood everyone conceives external objects as beings which act freely and arbitrarily. That is why the idea of the object is usually born out of the idea of another ego contraposed to one's own."§

Feuerbach's train of reasoning as concerns these matters was well-known to Marx and Engels. Not only did they give close attention to Feuerbach's arguments, but there is no doubt that their own views were greatly influenced thereby. If, afterwards, Engels showed the most profound contempt for German philosophy subsequent to Feuerbach, that was because, in his opinion, the later German philosophers had only furbished up

* "Hegel's 'absolute spirit' is nothing other than abstract spirit, spirit isolated from itself, the so-called ultimate spirit; just as the Infinite Being of theology is nothing other than abstract ultimate Being." Works, Vol. II, p. 243.

† *Primitive Culture*, 1871, Chapters XI-XVII.

‡ Cf. T. Gomperz, *Les Penseurs de la Grèce*, translated from the German by A. Reymond, Lausanne, 1905, pp. 414-415.

§ *Works*, Vol. II, p. 322.

the old philosophical errors which Feuerbach had refuted. In truth, this was what had happened. Not one of the modern critics of materialism has brought forward an argument which had not already been undermined, either by Feuerbach himself or, before him, by the French materialists.¹⁸ But to the critics of Marx, to Eduard Bernstein, Conrad Schmidt, Benedetto Croce and others, the "pitiful eclectic broth" of latter-day German philosophy seemed an entirely new dish. It was upon this that they nourished themselves; and, seeing that Engels regarded it as unworthy of attention, they fancied that he was "evading" the examination of arguments which he had long since analysed and declared to be valueless. This is an old, old story, perpetually renewed. You will never be able to persuade the rats that the cat is not much stronger than the lion.

While we thus have to recognise that there is a striking resemblance, and in some respects an identity, between the conceptions of Feuerbach and those of Forel, it is necessary to insist that, although Forel is much more fully informed concerning the data of natural science, Feuerbach takes the lead in matters philosophical. Forel makes mistakes which you will not find in Feuerbach. Forel speaks of his theory as the psycho-physiological theory of identity.* We need not raise any objection to this, since all terminology is conventional. But, since the theory of identity was formerly the foundation of a rigidly idealist philosophy, Forel would have done well to term his doctrine, frankly and boldly, a materialist one. However, it is plain that he is still animated by certain prejudices

* See his article entitled *Die psycho-physiologische Identitätstheorie als wissenschaftliches Postulat*, in the collection *Festschrift*, Rosenthal, Leipzig, 1906, Part I, pp. 11-132.

against materialism, and that is why he has chosen another name. It is therefore necessary to recall that identity, in the sense in which Forel uses the word, has nothing in common with identity in the idealist sense.

The critics of Marx are unaware of this. In his polemic against myself, Conrad Schmidt declares that the materialists hold the idealist doctrine of identity. As an actual fact, materialism recognises the unity of subject and object, but not their identity. Feuerbach himself put this very clearly.

According to Feuerbach, the unity of subject and object, of thought and being, has no meaning unless man is taken as the foundation of this unity. That formulation has still a certain humanist flavour, and few of those who have studied Feuerbach have thought it necessary to devote serious consideration to the precise manner in which man serves as the foundation of the unity of the above-mentioned opposites. Here is what Feuerbach means by it: "Only where thought is not a subject for itself, but the predicate of a real [material] being, is it not detached from being."* Now what are the philosophical systems in which thought is "a subject for itself," that is to say, something independent of the bodily existence of the thinking individual? Obviously, idealist systems. Idealists begin by transforming thought into a self-governing entity independent of the man, into a "subject for itself," and then they declare that in this entity (precisely because it has a distinct existence, independent of matter) is resolved the contradiction between being and thought.¹⁷ In fact, the contradiction is resolved there, for what is this entity? It is thought; and thought has an entirely independent existence, according to the idealists. But such a solution of the contradiction is purely formal.

* *Works*, Vol. II, p. 340.

It is achieved, as I have already pointed out, only by suppressing one of the elements of the contradiction, by suppressing the being that is independent of thought. Being is represented as a simple property of thought; and when we say that this or that object exists, we mean, if we are idealists, nothing more than that it exists in our thought. Such, for instance, was Schelling's view of the matter. For him, thought was the absolute principle from which the real world, that is to say nature and "ultimate" spirit, necessarily proceeded. But how? What does the existence of the real world mean? To an idealist, it means nothing more than existence in thought. For Schelling, the universe was only the self-contemplation of absolute spirit. Hegel took the same view. But Feuerbach was not satisfied with such a purely formal solution of the contradiction between thought and being. He showed that there is not and cannot be thought independent of man, that is to say independent of the real, material human being. Thought is an activity of the brain, and "the brain is only an organ of thought in so far as it is connected with a human head and a human body."*

We now see what Feuerbach means when he says that man is the foundation of the unity of being and thought. Man is this in the sense that he himself is nothing else than a material being endowed with the faculty of thought. But if he is such a being, it is obvious that neither of the elements of the contradiction need be suppressed in him: neither being, nor thought; neither matter, nor mind; neither subject, nor object. They are united in him as in a subject-object. "I am and I think . . . solely as a subject-object," says Feuerbach.

Being does not mean "existence in thought." In

* *Works*, Vol. II, pp. 362-363.

this respect, Feuerbach's philosophy is far clearer than that of Joseph Dietzgen. "Proof that a thing exists," says Feuerbach, "is proof that it does not exist solely in thought."* This is absolutely correct. But that means that the unity of thought and being does not, and cannot possibly, signify their identity.

Here we reach one of the most important of the characteristics which distinguish materialism from idealism.

IV.

When we say that for a few years Marx and Engels were disciples of Feuerbach, this is sometimes taken as implying that in course of time their outlook on the universe underwent such changes as to become completely different from that of Feuerbach. K. Diehl holds such a view. He thinks that there is a great tendency to exaggerate the influence exercised by Feuerbach on Marx.† This is a grave error. Even after they had ceased to be followers of Feuerbach, Marx and Engels continued to share many of his philosophical views. We see this plainly in Marx's *Theses on Feuerbach*. Here none of the fundamental ideas of Feuerbach's philosophy are refuted. Marx is content to amend them, and to demand that these ideas should be applied more consistently than they were applied by Feuerbach to the interpretation of the reality which environs man, and, in especial, to the interpretation of man's own activities. "It is not thought which determines being, but being which determines thought." This idea, which underlies the whole of Feuerbach's philosophy, becomes for Marx and Engels the foundation of the materialist interpretation of history. The

* *Works*, Vol. X, p. 187.

† *Handwörterbuch der Staatswissenschaften*, Vol. V, p. 708.

materialism of Marx and Engels is far more fully elaborated than was the materialism of Feuerbach; but the materialist views of Marx and Engels have been elaborated in the direction indicated by the inner logic of Feuerbach's philosophy. That is why these views, and especially their philosophical aspect, can never become perfectly clear except for those who have taken the trouble to learn how large a part of the philosophy of Feuerbach has been incorporated into the general outlook of the founders of scientific socialism. If you come across any one who tries to provide a "new philosophical foundation" for historical materialism, you may be sure that in this particular respect there must be great gaps in his knowledge, however well-informed he may be in other respects.

Well, I will leave these profound thinkers to their task, and proceed with my own. In the third of his *Theses on Feuerbach*, Marx approached the most difficult of all the problems with which he had to deal in the domain of the historical practice of man considered as a social being, the problems he was to solve with the aid of Feuerbach's sound idea of the unity of subject and object. This thesis runs as follows: "The materialist doctrine according to which men are the product of circumstances and education . . . fails to take into account the fact that circumstances are modified by men, and that the educator must himself be educated." As soon as this problem has been solved, the "secret" of the materialist conception of history has been discovered. Feuerbach, however, was unable to solve the problem. In the domain of history he remained an idealist,¹ like the French materialists of the eighteenth century, with whom moreover he had many other characteristics in common. Here Marx and Engels had to build anew, making use of the theoretical materials that

had up till then been accumulated by students of social science, and in especial by the French historians of the Restoration period. Still, in this respect likewise, Feuerbach's philosophy supplied them with a number of valuable pointers. More especially, Feuerbach had said: "Art, religion, philosophy and science are only manifestations or revelations of the human essence."* It follows that we must seek in the "human essence" the explanation of all the ideologies, this meaning that the evolution of these latter is conditioned by the evolution of the "human essence." But what is the "human essence"? To this question Feuerbach replies: "The human essence can only be found in the community, in the unity of man with man."† The answer is extremely vague, and here we have reached the limit which Feuerbach was never able to transcend.¹⁹ Now, it is only when that limit has been transcended that we enter the domain of the materialist conception of history we owe to Marx and Engels. That conception discloses to us the causes which, in the course of human evolution, determine "the community, the unity of man with man," that is to say, determine the mutual relations which bind man to man. This limit, this boundary, serves not merely to separate Marx from Feuerbach, but also to show how close the two thinkers were one to the other.

In the sixth of the *Theses on Feuerbach*, we read that the human essence is the totality of social relations. The definition is much more precise than Feuerbach's; but it serves likewise to show more clearly than anything else how close are the ties between the Marxian outlook on the world and the Feuerbachian philosophy.

When Marx penned this thesis he was already

* *Works*, Vol. II, p. 344.

† *Works*, Vol. II, p. 343.

aware, not only of the direction in which the solution of the problem was to be sought, but also of the solution itself. In his *Criticism of Hegel's Philosophy of Right*, he had shown that the relations of men in society, "legal relations, as well as the forms assumed by the State, cannot be explained by themselves, nor yet by what is called the general evolution of the human mind; but have their roots in the material conditions of existence, which Hegel, following the example of the English and French eighteenth-century writers, called, in their totality, 'civil society'; that the anatomy of civil society must be sought for in its economic structure."

All that remained was to explain the origin and evolution of "economic structure," and then we should have a full solution of the problem which materialism had been vainly trying to solve for centuries. This is the explanation that was given by Marx and Engels.

Obviously, when I speak of a full solution of this great problem, I mean no more than its general, its algebraical solution, for which materialism had been vainly seeking. When I speak of a full solution, I do not mean the arithmetic of social evolution, but its algebra; I do not mean an explanation of the causes of the various phenomena, but an explanation of the way in which we must set to work in order to discover these causes. This means that the value of the materialist conception of history is primarily methodological. Engels understood this perfectly well when he wrote: "What we want is not so much crude results, as study; results amount to nothing if they are taken by themselves and apart from the evolution which has led to them."* But this is precisely what Marx's critics (may God forgive them, as the phrase runs) for the most part fail to understand. Still worse, some of

* *Nachlass*, Vol. I, p. 477.

his disciples fail to understand it. Michel Angelo said of himself: "My teaching will procreate a great number of ignoramuses." Unfortunately this phophecy was fulfilled. Nowadays it is Marx's teaching which is procreating ignoramuses. Of course that is not the fault of Marx, but of those who utter so many follies in his name. If such follies are to be avoided, we must gain a true understanding of the methodological value of historical materialism.

V.

One of the supreme merits of Marx and Engels in this matter of materialism is that they elaborated a sound method. When Feuerbach concentrated all his efforts upon the struggle against the speculative element in Hegel's philosophy, he failed to appreciate and make use of the dialectical element. He declared: "The true dialectic is nowise a dialogue of the solitary thinker with himself, it is a dialogue between the ego and the tu."* But, first of all, in Hegel's writings, dialectic did not signify "a dialogue of the solitary thinker with himself"; and, secondly, Feuerbach's remark is no more than a definition of the starting-point of philosophy, and fails to grasp the method of philosophy. This gap was filled in by Marx and Engels, who understood that it would be a mistake, when criticising Hegel's speculative philosophy, to ignore his dialectic. Some critics have declared that, during the years that immediately followed his breaking away from idealism, Marx, too, turned a cold shoulder on dialectic. Although at the first glance there may seem to be good grounds for such an opinion, it is controverted by the before-mentioned fact that in the "Deutsch-Französische Jahrbücher" Engels was already

* *Works*, Vol. II, p. 345.

treating the method as the very soul of the new system.*

In any case, the second part of the *Misère de la philosophie* makes it perfectly clear that Marx, at the time of his controversy with Proudhon, was well aware of the value of the dialectical method and knew how to turn it to good account. In this controversy, the victory of Marx over Proudhon was that of a man who knew how to think dialectically over a man who had never grasped the essence of dialectic, but was trying, none the less, to apply the dialectical method to the analysis of capitalist society. This same second part of the *Misère de la philosophie* shows that dialectic, which in Hegel had had a purely idealist character, and in Proudhon's hands (so far as Proudhon had assimilated it) had remained idealist, had been placed by Marx on a materialist foundation.²⁰

Subsequently, describing his materialist dialectic, Marx wrote: "For Hegel, the thought process (which he actually transforms into an independent subject, giving to it the name of 'idea') is the demiurge [creator] of the real; and for him the real is only the outward manifestation of the idea. In my view, on the other hand, the ideal is nothing other than the material when it has been transposed and translated inside the human head."† This description implies full agreement with Feuerbach: first of all, as regards the opinion concerning Hegel's "idea"; and secondly, as concerns the relations between thought and being. Only one convinced of the soundness of the basic principle of Feuer-

* Engels was not writing of his personal outlook alone, but of the outlook of all those who shared his views. "We must . . .," he said. There can be no doubt that Marx was one of those who shared his views.

† From the preface to the second German edition of *Das Kapital*.

bach's philosophy, only one who held that it is not thought which determines being, but being which determines thought, was competent to turn the Hegelian dialectic upside down, so that henceforward it should stand upon its feet instead of upon its head.*

Many people confound dialectic with the theory of evolution. Dialectic is, in fact, a theory of evolution. But it differs profoundly from the vulgar theory of evolution, which is based substantially upon the principle that neither in nature nor in history do sudden changes occur, and that all changes taking place in the world occur gradually. Hegel had already shown that, understood in such a sense, the theory of evolution was inconsistent and absurd.

"The ordinary notion of the appearance or disappearance of anything, is the notion of a gradual appearance or disappearance. Nevertheless, there are transformations of being which are not only changes from one quality to another, but also changes from the quantitative to the qualitative."† Thus there occurs a change which leads to the substitution of one phenomenon for another, and involves a breach of continuity. Now, every time that there is a breach of continuity, there occurs a sudden change in the course of evolution. Hegel goes on to show by numerous examples how often such sudden changes occur in nature and in history, and he exposes the absurd mistake which underlies the vulgar theory of evolution. "Underlying the theory of gradualness," he says, "is the idea that that which makes its appearance already exists effectively, and only remains imperceptible because it is so very small. In like manner, when we speak of the gradual disappearance of a pheno-

* *Ibid.*

† *Wissenschaft der Logik*, Nuremberg, 1812, Vol. I, p. 313.

menon, we imagine that this disappearance is an accomplished fact, and that the phenomenon which takes the place of the antecedent one already exists, but that neither the one nor the other is as yet perceptible. . . . In this way, however, we are really suppressing all understanding of appearance and disappearance. . . . To explain the appearance or disappearance of a given phenomenon by the gradualness of the transformation is absurdly tautological, for it implies that we consider as having already appeared or disappeared, that which is actually in course of appearing or disappearing.”*

Marx and Engels whole-heartedly adopted this dialectical view of Hegel's as to the inevitability of jumps in the process of evolution. Engels developed it in a detailed fashion in his controversy with Dühring, and here he “set it on its feet,” that is to say, he placed it on a materialist foundation.

Thus he showed that the passage from one form of energy to another could only occur suddenly.²¹ He sought in modern chemistry a confirmation of the dialectical theory of the transformation of quantity into quality. Speaking generally, he considered that the laws of dialectical thought were confirmed by the dialectical properties of being. Here, as usual, being conditions thought.

I do not propose, here, to undertake a more detailed characterisation of dialectical materialism; and as regards its relations with what may be called elementary logic and elementary mathematics, I shall be content to refer the reader to the preface to my trans-

* *Ibid.*, pp. 313-314.—As regards the question of sudden changes, see my pamphlet *Tikhomirov's Mistake*, St. Petersburg, pp. 6-14. (See appendix of the present work, *Sudden Changes in Nature and History*.)

lation of the essay on *Ludwig Feuerbach*.* But I may remind the reader that the evolutionary theory which has been dominant in biology for the last twenty years, the theory according to which evolution has been exclusively the outcome of gradual modifications, has begun to lose ground. In this matter, the work of Armand Gautier and that of Hugo de Vries would appear to be epoch-making. Suffice it to say that De Vries's theory of mutations is a theory that the origin of species has occurred by sudden changes. (See De Vries's work in two volumes, *Die Mutationstheorie*, Leipzig, 1901-1903; his report, *Die Mutationen und die Mutationsperioden bei der Entstehung der Arten*, Leipzig, 1901; and the German translation of his lectures delivered at the University of California, *Arten und Varietäten und ihre Entstehung durch die Mutation*, Berlin, 1906.)²²

In the opinion of this famous naturalist, the weak point in Darwin's theory as to the origin of species is precisely this, that according to it the origin of species could be explained by gradual changes.† Extremely interesting, too, and perfectly sound, is De Vries's remark that the theory of gradual changes, which has been dominant in the doctrine of the origin of species, has exerted an unfavourable influence upon the experimental study of matters bearing on this question.‡

I may add that, in modern biological circles, and especially among the neo-Lamarckians, there has been a rapid spread of the theory of "animated matter," the view that matter in general, and especially all the matter of which organised beings consist, possesses a certain degree of sensibility. This doctrine, which some regard as directly opposed to materialism (see, for in-

* See the appendix to the present volume, *Dialectic and Logic*.

† *Die Mutationen*, pp. 7-8.

‡ *Arten, etc.*, p. 421.

stance, *Der heutige Stand der Darwin'schen Frage*, by R. H. Francé, Leipzig, 1907), is really, when properly understood, only a translation into modern biological language of Feuerbach's materialist doctrine concerning the unity of being and thought, of object and subject.* There can be no doubt that Marx and Engels would have been keenly interested in this trend of contemporary natural science, though it is as yet far too little elaborated.

Alexander Herzen was right in saying that Hegel's philosophy, although regarded by many as essentially conservative, was in truth an algebra of revolution.† But in Hegel this algebra was left without application to the burning questions of practical life. The predominance of the speculative element necessarily gave the philosophy of this great idealist a conservative trend. It is altogether different with the materialist philosophy of Marx. Here revolutionary algebra manifests itself in all the invincible strength of its dialectical method. Marx wrote: "In its mystified form, dialectic became the fashion in Germany, because it seemed to elucidate the existing state of affairs. In its rational form, it is a scandal and an abomination to the bourgeoisie and its doctrinaire spokesmen, because, while supplying a positive understanding of the existing state of things, it at the same time furnishes an understanding of the negation of that state of things, and enables us to recognise that that state of things will inevitably break up; it is an abomination to them because it regards every historically developed social form as in fluid movement, as

* To say nothing of Spinoza, it must not be forgotten that many of the French materialists of the eighteenth century were inclined to adopt a theory of "animated matter."

† See F. Engels, *Ludwig Feuerbach*, pp. 1-5.

transient; because it lets nothing overawe it, but is in its very nature critical and revolutionary.”*

If we consider dialectical materialism from the outlook of Russian literature, we may say that this dialectic was the first to supply a method competent to solve the problem of the rational character of all that exists, a question which had so greatly troubled our brilliant thinker Belinsky.† Nothing but the dialectical method of Marx applied to the study of Russian life has been able to show how much reality and how much seeming there was in this latter.

VI.

Turning now to consider the materialist conception of history, our first difficulty is, as we foresaw, how we are to ascertain the true causes of the development of social relations. We know already that the “anatomy of civil society” is determined by its economic structure. But by what is this economic structure itself determined?

Marx’s answer ran as follows: “In the social production which human beings carry on, they enter into definite relations, which are determined, that is to say, independent of their will—productive relations which correspond to a definite evolutionary phase of the material forces of production. The totality of these productive relations forms the economic structure of society, the real basis upon which a legal and political superstructure develops.”‡

Marx’s answer thus reduces the whole problem of

* See the preface to Marx’s book, *Zur Kritik der politischen Oekonomie*.

† See my article *Belinsky and Rational Reality* in the collection *Twenty Years*. [Works, Vol. X.]

‡ From the preface to the second German edition of *Das Kapital*.

the development of economic structure to the problem of the causes that determine the evolution of the productive forces of society. In this latter form, the problem is primarily solved with reference to the nature of the geographical environment.

Hegel, in his *Philosophy of History*, had already drawn attention to the importance of the "geographical basis of universal history." But since, in his view, the ultimate cause of all evolution was the idea, and since he referred only in passing and reluctantly, as concerns matters of secondary importance, to the materialist explanation of phenomena, it was impossible that the thoroughly sound idea he entertained as to the great significance of geographical environment should bear fruit. The supremely important conclusions of this theory could only be drawn by the materialist Marx.* The properties of the geographical environment determine the character, not only of the natural products with which man satisfies his wants, but also of the objects which man himself produces in order to satisfy these wants. Where there were no metals, aboriginal tribes could not, unaided, get beyond the limits of what is termed the Stone Age. In like manner, if primitive fishers and primitive hunters were to pass on to the stage of cattle-breeding and that of agriculture, suitable geographical conditions were requisite, a suitable fauna and flora. Lewis Morgan has shown that the remarkable difference between the social evolution of the New World and that of the Old, is to be explained by the lack in the New World of animals capable of being domesticated, and by the differences between the flora of the New World and the Old.†

Writing of the redskins of North America, Waitz

* *Die Indianer Nordamerikas*, Leipzig, 1865, p. 91.

† See *Ancient Society*.

says: "They have no domesticated animals. This is extremely important, for it is the principal reason why they have remained at such a low stage of development."* Schweinfurth relates that in Africa, when region is overcrowded, part of the population emigrates and thereupon changes its mode of life in accordance with the geographical environment: "Tribes which have hitherto been engaged in agriculture will take to hunting, and tribes which have lived by cattle-breeding will turn to agriculture."† Schweinfurth also points out that the inhabitants of a region which, like much of Central Africa, is rich in iron, naturally take to smelting and to making iron weapons and tools.‡

Nor is this all. Already in the lowest stages of social evolution, tribes enter into relation one with another, mutually exchanging some of their products. The result is an enlargement of the boundaries of their geographical environment, and that in its turn has an effect upon the evolution of the productive forces in each of the tribes, quickening this evolution. It will readily be understood that the ease with which such relations become established and developed depends also upon the characteristics of the geographical environment. Hegel said that seas and rivers bring men closer together, whereas mountains keep them apart. Though this is true, the seas only bring men closer together when the development of the forces of production has already attained a tolerably high level. As long as that level is low, the sea (as Ratzel rightly points out) is a great hindrance to intercourse between the races which

* As I have already pointed out, in this matter Feuerbach did not advance beyond Hegel.

† *Au cœur de l'Afrique*, Vol. I, p. 209.

‡ *Ibid*, Vol. II, p. 94.—Concerning the influence of climate on agriculture, cf. also Ratzel, *Die Erde und das Leben*, Leipzig and Vienna, 1902, Vol. II, pp. 540-541.

it separates.* However this may be, it is certain that the more variable the properties of the geographical environment, the more favourable they are to the development of the forces of production. Marx writes: "It is not the absolute fertility of the soil but the multifariousness of its natural products which constitutes the natural foundation of the social division of labour, and, by changing the natural conditions of his environment, spurs man on to multiply his own needs, capacities, means of labour, and methods of labour."† Using almost the same terms as Marx, Ratzel says: "The most important thing is, not that there is a greater facility in procuring food, but that certain inclinations, certain habits and, finally, certain wants are awakened in man."‡

Thus the peculiarities of the geographical environment determine the evolution of the forces of production, and this, in its turn, determines the development of economic forces and, therefore, the development of all the other social relations. Marx explains the matter in the following terms: "The social relations which the producers enter into one with another, the conditions of their reciprocal activities, and their participation in the totality of production, differ in accordance with differences in the character of the forces of production. The invention of a new weapon, the fire-arm, necessarily modified the whole internal organisation of an army, the relations within whose scope individuals form an army—the relations which make of it an organised whole. Necessarily, too, this invention modified the relations between different armies."§

* *Anthropogeographie*, Stuttgart, 1882, p. 29.

† *Capital*, Vol. I, new translation, 1928, p. 557.

‡ *Völkerkunde*, Leipzig, 1887, Vol. I, p. 56.

To make this explanation more convincing, I will give another instance. The Masai, in eastern equatorial Africa, do not take prisoners, give no quarter, the reason being that, as Ratzel points out, they are pastoral people, so that the technical possibility of making use of slave labour has not arisen among them. But the Wakamba, who, though neighbours of the Masai, are agriculturists, have a use for slave labour, and they, therefore, give quarter, take prisoners and make slaves of them. The appearance of slavery as an institution thus presupposes that the social forces have reached a degree of development at which the exploitation of the labour of prisoners has become possible.* But slavery is a relation of production whose appearance indicates the beginnings of class division in a society which has hitherto known no other divisions than those of sex and age. When slavery is in full bloom, it puts its stamp on the whole economy of the society in which it exists, and thereby upon all the other social relations—especially upon the political regime. However diversified the States of classical antiquity were in the matter of political regime, they all had this characteristic in common, that every one of them was a political organisation concerned to express and to defend the interests of freemen alone.

* *Völkerkunde*, Vol. I, p. 83.—It must be noted further, that to make slaves of conquered enemies is sometimes, in the early phases of social evolution, nothing more than the forcible incorporation of persons into the social organisation of the conquerors, the prisoners receiving the same rights as the conquerors. In that case, there is no profit derivable from the surplus labour of the prisoner, but merely a mutual advantage derivable from collaboration. However, even this form of slavery presupposes the existence of specific forces of production and of a specific organisation of production.

VII.

We now know that the development of the forces of production (which for its part, in the last resort, determines the development of all social relations) itself primarily depends upon the peculiarities of the geographical environment. But as soon as specific social relations have come into existence, they, in their turn, exercise a marked influence upon the development of the forces of production. Hence that which primarily was a consequence, becomes in its turn a cause; between the evolution of the forces of production, on the one hand, and the social regime, on the other, there occurs a play of action and reaction which assumes, at various epochs, the most divergent forms.

Nor must we fail to note that the state of the forces of production determines, not only the internal relations existing within a given society, but also the external relations between this society and other societies. To each phase of the development of the forces of production there corresponds a determinate character of armaments, of the military art and, finally, of international law—or, to speak more accurately, of inter-social or intertribal law [custom]. Hunting tribes are not in a position to constitute large political organisations, were it only for the reason that, owing to the low level attained by the forces of production, primitive hunters are compelled to undertake scattered efforts, each one for himself, in the search for food, and therefore can only form tiny social groups. But the more widely these social groups are dispersed, each fighting for its own hand, the more inevitable is it that there should occur sanguinary combats for the settlement of disputes which, in a civilised society, could easily be settled by a magistrate. Eyre relates that, although various Australian tribes will meet for certain pur-

poses in a particular place, these contacts are never of long duration. Even before a shortage of food, or the need to return to the chase, has obliged the Australian aborigines to part company, feuds begin among them, and speedily assume the proportions of battles.* Every one knows that such conflicts may arise from very various causes. It is worth noting, however, that most travellers attribute them to economic causes. When Stanley asked some of the natives of equatorial Africa why they made war against neighbouring tribes, the answer was: "Some of our young men go into the woods to hunt game, and they are surprised by our neighbours; then we go to them, and they come to fight us until one party is tired or one is beaten."† Burton says much the same thing: "All African wars . . . are for one of two objects, cattle-lifting or kidnapping."‡ Ratzel believes that in New Zealand the chief cause of war between the natives has been the desire to eat human flesh.§ As for the strong inclination which the indigens of New Zealand have towards cannibalism, this is itself to be explained by the poverty of the New Zealand fauna.²⁴

Every one knows to how great an extent the outcome of a war depends upon the equipment of the rival belligerents. But their equipment is determined by the condition of the forces of production, by economic conditions, by the social relations which have

* E. J. Eyre, *Manners and Customs of the Aborigines of the Australias, Journals, etc.*, London, 1847, Vol. II, p. 243.

† *In Darkest Africa*, 1890, Vol. II, p. 92.

‡ *The Lake Regions of Central Africa*, 1860, Vol. II, p. 368.

§ *Völkerkunde*, Vol. I, p. 93.

been built up upon the economic basis.* To say that these or those peoples or tribes have been conquered by other peoples or tribes, does not serve to explain why the social consequences of the subjugation are exactly what they are. The social consequences of the conquest of Gaul by the Romans were not the same as the results of the conquest of that country by the Germans. The social consequences of the conquest of England by the Normans were very different from those which resulted from the conquest of Russia by the

* This is admirably explained by Engels in the chapters of his *Anti-Dühring* devoted to the analysis of the theory of force.—See also *Les maîtres de la guerre*, by Lieutenant-Colonel Rousset, professor at the Higher Military Academy, Paris, 1901. The author of this book, expounding the views of General Bonnal, writes (p. 4): "The social conditions prevailing in any given epoch have a preponderating influence, not only on the military organisation of a nation, but also on the character, the capabilities and the trends of its military men. Generals of the ordinary stamp accept unquestioningly the methods of action customary in their day, use the familiar means and achieve successes or sustain reverses according as circumstances are favourable or unfavourable. . . . But the great captains modify accepted methods and procedures in accordance with the promptings of their own genius." This is extremely interesting! It seems that they are "enlightened by a sort of divinatory instinct, transforming ways and means in accordance with the laws of a social evolution of which—alone in their day—they understand the decisive effect and the repercussion on the technique of their art." This implies that if we discover the hidden tie between "social evolution" and the economic development of society, we shall find a materialist explanation for the most unexpected and apparently unaccountable successes in war. Rousset himself is on the verge of giving such an explanation. His historical sketch of the art of modern warfare, based on the unpublished papers of General Bonnal, closely resembles what Engels sets forth in the before-mentioned analysis. Sometimes there is an absolute identity of outlooks.

Tartars. In all these cases the difference depended in the last analysis upon the difference between the economic regime of the subjugated society and that of the conquering society. The higher the development of the economic forces of a tribe or a nation, the better the chances this tribe or nation has of arming itself to carry on the struggle for existence effectively.²⁵

Nevertheless, to this rule there are numerous exceptions, which must now be considered. When the development of the forces of production is at a very low level, the difference between the equipment of tribes which are at different levels of economic development (for instance, a tribe of nomadic shepherds, on the one hand, and a tribe of settled agriculturists, on the other) cannot be so great as it becomes at higher levels of economic development. Furthermore, advance in economic development, exercising a specific influence upon the character of a given nation, reduces the pugnacity of this latter, and sometimes does so to such an extent that it becomes unable to put up a successful fight against an enemy economically backward but more habituated to warfare. That is why we frequently find that peaceful tribes of agriculturists are subjugated by warrior nations. Ratzel remarks that the most solid political organisms are formed by "semi-civilised peoples," the reason being that in them two elements, the agricultural and the pastoral, have been unified by conquest.* However sound a generalisation this may be, we must not forget that in such cases (of which China gives an excellent example) the conquerors who are backward economically speaking are by degrees subjected to the influence of those whom they have conquered but who are more advanced economically speaking.

* *Völkerkunde*, p. 19.

The geographical environment exercises considerable influence, not only on primitive tribes, but also on what are called civilised nations. Marx wrote: "The need for the social control of a natural force, the need for economising it, appropriating it on a large scale, or taming it, the need for doing these things by the work of human hands, plays the most decisive part in the history of industry. Take as an instance, hydraulic works in Egypt, Lombardy, Holland etc. Irrigation in India, Persia etc. is another instance. There, irrigation by means of artificial canals not only supplies the soil with the water indispensable to it, but also carries down to it, in the shape of sediment from the hills, mineral fertilisers. The secret of the flourishing state of industry in Spain and Sicily under Arab rule was to be found in irrigation works."*

The theory of the influence which the geographical environment exerts upon the historical evolution of mankind has often been reduced to a simple recognition of the direct influence of climate upon man in society. It has been supposed that, under the influence of one climate, a race becomes passionately devoted to liberty; that under the influence of another climate, another race will become inclined to endure patiently the rule of a more or less despotic sovereign; that under the influence of a third climate, yet another race will become superstitious, and will therefore accept the sway of a priesthood. Such, for example, were the views held by Buckle.† According to Marx, the geographical

* *Capital*, new translation, 1928, pp. 557-558.

† See his *History of Civilisation in England*. According to Buckle, the general aspect of nature, which is, in his view, one of the four causes determining the particular character of a people, acts especially on the imagination, and a strongly developed imagination engenders superstitions, which, in their turn, retard the development of

environment acts on man through the instrumentality of the relations of production which arise in a given area upon the foundation of the given forces of production, whose primary condition of development consists in the properties of this very environment. Modern ethnology inclines more and more towards such an outlook, and consequently ascribes less and less importance to race as a factor in the history of civilisation. "The possession of a certain amount of civilisation," writes Ratzel, "has nothing whatever to do with race in itself."²⁶

Still, there can be no doubt that, as soon as a certain level of civilisation has been attained, this civilisation exercises an influence upon the bodily and mental qualities of the race.*

The influence of the geographical environment upon man in society is a variable one. The evolution of the forces of production determined by the properties of the knowledge. The frequency of earthquakes in Peru, by acting on the imagination of the inhabitants of that country, has thus affected their political regime. If Spaniards and Italians are superstitious, this is also the outcome of earthquakes and volcanic eruptions.—Such direct psychological action is especially strong in the early stages of the development of civilisation. Modern science, however, has disclosed a striking resemblance between the religious beliefs of primitive races situated at the same level of economic development. The opinions of Buckle, who borrowed them from seventeenth century writers, date back to Hippocrates. See the latter's *On Airs, Waters and Places*, in Francis Adams' translation of the Works published by the Sydenham Society, London, 1849, Vol. I, pp. 205-222.

* As concerns race, see J. Finot's interesting work, *Le préjugé des races*, Paris, 1905.—Waitz writes: "In certain negro tribes we find striking examples of the tie between the main occupation of a people and its national character." *Anthropologie der Naturvölker*, Vol. II, p. 107.

geographical environment increases the power of man over nature, and thereby brings into being a new relation between man and the geographical environment. The English to-day react upon the geographical environment of their island in a way which differs from that in which the British tribes of Cæsar's day reacted upon the same environment. This answers the objection that the character of the population of a given country can be essentially transformed although the geographical conditions remain unaltered.

VIII.

The legal and political relations* engendered by a given economic structure exert a decisive influence upon the whole psychology of man as a social being.³⁷ Marx says: "Upon the various forms of property, upon the social conditions of existence, there is erected a whole superstructure of sensations, illusions, ways of thinking, outlooks on life, of the most diversified kinds." Being determines thought. We may say that every advance made by science in the explanation of the process of social evolution has come as a fresh argument in favour of this fundamental thesis of modern materialism.

* As regards the effect of economic conditions on social relations, see Engels, *The Origin of the Family, Private Property and the State*; also R. Hildebrand, *Recht und Sitte auf verschiedenen Kulturstufen*, Part I, Jena, 1896. Unfortunately Hildebrand does not know how to make a good use of economic data. T. Achelis' interesting little monograph, *Rechtsentstehung und Rechtsgeschichte*, Leipzig, 1904, considers law as a product of social evolution, but does not go deeply into the question of what is the cause of this evolution. In M. A. Vaccaro's book, *Les bases sociologiques du droit et de l'état*, Paris, 1898, we find numerous scattered observations throwing light on certain aspects of the question, but, speaking generally, the author has not himself attained clarity of vision on the subject. See also Teresa Labriola's *Revisione critica delle più recenti teorie sulle origine del diritto*, Rome, 1901.

As long ago as 1877, Ludwig Noiré wrote: "It was joint activity, directed towards a common end, it was the primordial labour of our ancestors, which gave birth to language and to reasoning."* Developing this remarkable thought, Noiré points out that, primitively, language indicated the things of the objective world, not as forms, but as things formed; not as active beings, as beings exerting an action, but as passive beings, beings subjected to an action.† He explains this by the sound remark that "things make their appearance in man's visual field, that is to say they acquire for him existence as things, solely in proportion to the degree in which they are subjected to his action; and it is in conformity with this that they receive their names."‡ To sum up, it is human activity, so Noiré considers, which provides the primitive roots of language with their content.§ It is interesting to note Noiré's remark that the germs of his theory were contained in Feuerbach's idea that the essence of man lies in the community, the unity of man with man. Obviously, Noiré knew nothing about Marx, for, if he had done so, he would have seen that his conception of the part played by activity in the formation of language is more akin to the doctrine of Marx than to that of Feuerbach—inasmuch as Marx, in his theory of cognition, laid especial stress upon the importance of human activity, thus contrasting with Feuerbach, who laid stress upon contemplation.²⁸

In this connection, I need hardly point out that the character of human activity in the process of production is determined by the condition of the forces of pro-

* *Der Ursprung der Sprache*, Mainz, 1877, p. 331.

† *Ibid.*, p. 341.

‡ *Ibid.*, p. 347.

§ *Ibid.*, p. 369.

duction. This is obvious. It is more important to remember that the decisive influence of being upon thought is especially noticeable in primitive races, whose social and intellectual life is so much simpler than that of civilised nations. Writing about the indigens of central Brazil, Karl von den Steinen says that we can only understand them when we regard them as the products of a hunting existence. "The chief sources of their experience," he says, "have been their contact with animals, and it is mainly upon these experiences that they rely in their attempts to explain nature, to form an idea of the world."* The conditions of a hunter's life have determined, not only their general outlook on the world, but also their moral ideas, their sentiments, and even, says Von den Steinen, their artistic tastes. We see exactly the same thing in pastoral peoples. Among those whom Ratzel calls "exclusively herdsmen," we find that "ninety per cent. of their conversations turn upon cattle, upon the origin, the habits, the merits and the defects of cattle.† The unfortunate Herreros, whom the "civilised Germans" have recently "pacified" with so much brutality, belong to these "exclusively herdsmen" peoples.‡

* *Unter den Naturvölkern Zentral-Brasiliens*, Berlin, 1894, p. 201.

† *Op. cit.*, pp. 205-206.

‡ As regards the "exclusively herdsmen" peoples, see Fischer's book, *Eingeborene Sud-Afrikas*, Breslau, 1872. Fischer writes: "The Kaffir's ideal, the object of his dreams, that which he loves to sing of, is cattle, his most precious possession. In Kaffir folk-song, the praise of cattle alternates with the praise of tribal chiefs; and when tribal chiefs are in question, when they are being extolled, we hear a great deal about their cattle." Vol. I, p. 50.—"Tending cattle is, in the eyes of a Kaffir, the most honourable of all occupations." Vol. I, p. 85.—"If war is a Kaffir's favourite amusement, this is mainly because,

Since for the primitive hunter live beasts, his quarry, were the main source of his experiences, and since his whole outlook on the world was based on these experiences, it is not surprising that the mythology of hunting tribes is full of the imagery of living animals and that this mythology, for them, takes the place of philosophy and theology and science. Andrew Lang writes: "The peculiarity of Bushman mythology is the almost absolute predominance of animals. Except 'an old woman' who appears now and then in these incoherent legends, their myths have scarcely one human figure to show."* According to Brough Smith, the Australian Blackfellows, who, like the Bushmen, are still in the hunting stage, have as gods, for the most part, birds and beasts.†

The religions of primitive races have not as yet been adequately studied. What we know about the matter is already sufficient to provide absolute confirmation in his view, it is connected with the idea of booty, which consists of cattle." Vol. I, p. 79.—"Lawsuits among the Kaffirs turn upon cattle." Vol. I, p. 322.—We owe to Fischer, likewise, an extremely interesting description of the life of the Bushmen, who are hunters. Vol. I, pp. 424 *et seq.*

* *Myth, Ritual, and Religion*, London, 1887, Vol. II, p. 15.

† *Aborigines of Victoria*, Vol. I, p. 440.—Worth quoting, in this connection, is the remark of R. Andree, who says that, primitively, man represents gods to himself in an animal form. "When, subsequently, people came to conceive of animals endowed with anthropomorphic attributes, the myths of the changing of men into animals arose." (*Ethnographische Parallelen und Vergleiche, Neue Folge*, Leipzig, 1889, p. 116.) The appearance of anthropomorphic ideas concerning animals presupposes a comparatively high level of the development of the forces of production. Cf. also, Frobenius, *Die Weltanschauung der Naturvölker*, Weimar, 1898, p. 24.

tion of the brief formula of Feuerbach and Marx, to the effect that "it is not religion which makes man, but man who makes religion." Tylor says: "It is obvious that, among all nations, man was the type of divinity. This explains why the structure of human society and its government have become the models for celestial society and the government of the heavens."* Here we already have, undeniably, a materialist conception of religion. We know that Saint-Simon held the opposite view, that he explained the social and political regime of the ancient Greeks as the outcome of their religious beliefs. Even more important, however, is the fact that science has already begun to discover the causal tie between the development of technique in primitive races and their conception of the world.† Beyond question, numerous and valuable discoveries await us in this direction.‡

Among all the ideologies of primitive society, art has been the one most carefully studied. In this domain abundant materials have been collected, providing unassailable proof of the soundness, one might say the inevitability of the materialist conception of history. These materials are so numerous that I must content myself here with a bare mention of the most important works bearing on the subject. They are given below.‡

* *Primitive Culture.*

† Cf. G. Schurz, *Vorgeschichte der Kultur*, Leipzig and Vienna, 1900, pp. 559-564.—I shall return to this matter.

‡ Schweinfurth, *Artes Africanæ*, Leipzig, 1875; R. Andree, *Ethnographische Parallelen* (article entitled "Das Zeichnen bei den Naturvölkern"); Von den Steinen, *Unter den Naturvölkern Zentral-Brasiliens*, Berlin, 1894; G. Mallery, *Picture Writing of the American Indians* ("Annual Report of the Bureau of Ethnology," Washington, 1893.—the reports for other years contain valuable information bearing on the influence exerted by technique, and especially that of weaving, upon decorative art); Höernes,

The quotations I am about to make, and similar passages which can be found in the works of the authors just mentioned, suffice to show the conclusions of modern science as regards this question of the birth of art.

Hörnes writes: "Decorative art can only develop upon the foundation of industrial activity, which is a necessary material preliminary. . . . Nations without established industry have no decorative art, and cannot have anything of the kind."*

Von den Steinen considers that "Zeichnen" (drawing) developed from "Zeichen" (making signs) adopted with a practical aim, in order to point out objects.

Bücher comes to the conclusion that "work, music and poetry were, in their primitive stages, a united whole, but that the basic element of this trinity was work, the other two elements having only an accessory value." In his opinion, "the origin of poetry must be sought in work." He remarks that no language arranges rhythmically the words which make up a sentence. It is, therefore, impossible that men can come to employ poetical language, rhythmically arranged, by way of the use of their ordinary speech. The internal logic of the latter is an obstacle here.

Urgeschichte der bildenden Kunst in Europa, Vienna, 1898; Ernst Grosse, *Die Anfänge der Kunst*, also *Kunstwissenschaftliche Studien*, Tübingen, 1900; Yrjö Hirn, *The Origins of Art*, London, 1900; Karl Bücher, *Arbeit und Rythmus*, third edition, 1902; Gabriel and Adrien de Mortillet, *Le préhistorique*, Paris, 1900, pp. 217-230; Hörnes, *Der diluviale Mensch in Europa*, Brunswick, 1903; Sophus Müller, *L'Europe préhistorique*, translated from the Danish by E. Philippot, Paris, 1907; Richard Wallaschek, *Anfänge der Tonkunst*, Leipzig, 1903.³⁰

* *Urgeschichte*, etc., p. 38.

How, then, can we explain the origin of rhythmical language? Bücher supposes that the rhythmical and co-ordinated movements of the body transmitted the laws of their coordination to richly figurative expressions. This theory seems all the more plausible when we remember that, at an early stage of social evolution, rhythmical movements are the habitual accompaniments of song. But how are we to explain the coordination of bodily movements with rhythmical speech? The explanation is to be found in the character of the processes of production. Thus "the secret of versification is to be found in productive activity."* According to R. Wallaschek, dramatic representations originated among primitive races in the following way:†

"The subjects of these early dramatic representations were:

"1. The chase, war, rowing. (Among hunting peoples, the life and the habits of animals. Animal pantomimes and masks.‡)

"2. The life and habits of domesticated animals (among pastoral peoples).

"3. Work. (Among tillers of the soil, various kinds of agricultural work, such as sowing, threshing, vine-dressing.)

"The dramatic performance is carried out by the assembled tribe, which sings in chorus. Words are sung appropriate to the pantomime. The actions figured are those of daily life, those that are absolutely essential in the struggle for existence."

Wallaschek declares that in many tribes, when such representations take place, the choir is divided into two parts which face one another. "Such," he adds, "was

* *Arbeit und Rythmus*, p. 342.

† *Anfänge der Tonkunst*, p. 257.

‡ These masks, likewise, usually represent animals.

the primitive state of Greek drama, which also, to begin with, was an animal pantomime. The animal which played the most important part in the economic life of the Greeks was the goat (*tragos*), whence is derived the word *tragedy*."

It would be difficult to give a more striking illustration of the thesis that it is not being which is determined by thought, but thought by being.

IX.

Economic life develops under the influence of an increase in the forces of production. That explains why the relations between human beings engaged in the process of production undergo changes, and why therewith changes occur in human mentality. Marx wrote: "At a certain stage of development, the material productive forces of society come into conflict with the existing productive relations, or (to express the matter in legal terminology), with the property relations within which they have hitherto moved. These relations, which have previously favoured the development of the forces of production, now become fetters on production. A period of social revolution then begins. Concomitantly with the change in the economic foundation, the whole gigantic superstructure is more or less rapidly transformed . . . No type of social structure ever perishes until there has been developed all the productive forces for which it has room; and new and higher forces of production never appear on the scene until the material conditions of existence requisite for their development have matured within the womb of the old society."¹ That is why mankind never sets itself any tasks which it is not able to perform, for when we look closely into the matter, we shall always find that the demand for the new enterprise only arises when the material conditions of existence are ripe for

its successful performance—or at any rate have begun to ripen.”*

Here we have a veritable “algebra,” a pure materialist algebra, of social evolution. In this algebra there is just as much place for sudden changes (during the period of the social revolution) as there is for gradual transformations. The gradual transformations in the characteristics of a particular order of things, quantitative transformations primarily, lead ultimately to a change in quality, that is to say to the disappearance of the old method of production (or, to use Marx’s phrase in this connection, to the disappearance of the old social structure) and to its replacement by a new method of production. According to Marx, the four different methods of production, known as the oriental or Asiatic, the classical, the feudal and the modern (capitalist) method, may, generally speaking, be considered as four successive epochs of the economic evolution of society. We have, however, reason to believe that, at a later date, when he had read Lewis Morgan’s book, *Ancient Society*, Marx modified his views as to the relations between the classical method of production and the Asiatic method. For, in actual fact, the logic of the economic development of the feudal method of production led to the social revolution which was characterised by the triumph of capitalism. On the other hand, the logic of the economic development of China, or of ancient Egypt, did not lead to the appearance of the classical method of production. In the former instance, we are concerned with two phases of development of which the second follows the first and is engendered by the first; whereas in the other case we have to do with two coexisting types of economic development. Classical society succeeded to the clan

* From the preface to *Zur Kritik der politischen Oekonomie*, 1859.

type of social organisation, and this clan type of organisation was also the antecedent of the oriental social system. Each of these two types of economic organisation appeared as the outcome of an increase in the forces of production, an increase which had occurred within the social organisation based upon the clan system, and ultimately led to the break up of this organisation. If the two types, the classical and the oriental respectively, differed greatly each from the other, this was because, in both the respective cases, the development was influenced by the geographical environment. Thanks to the influence of the geographical environment, when a given development of the forces of production had occurred, there resulted a specific aggregate of the relations of production, differing in the two cases because the geographical environment was different.

The discovery of the clan type of social organisation is obviously predestined to play in sociology the same part that the discovery of the cell has played in biology. In so far as Marx and Engels lacked a knowledge of the clan type of organisation, it was inevitable that their theory of social evolution should exhibit considerable gaps, as Engels subsequently came to recognise.

But the discovery of the clan type of social organisation, a discovery thanks to which it for the first time became possible to understand the lower stages of social evolution, was but an additional and potent argument in favour of the materialist conception of history. Thanks to this discovery, it became possible to understand, a great deal better than before the course of the early phases of the social organism and the manner in which the development of these determined social thought. Thus this discovery emphasised the truth that social thought is determined by social being.

I refer to this matter only in passing. The main point with which we are now concerned is that Marx showed how property relations, when the forces of production have attained a certain degree of development, favour for a time an increase in these forces, and subsequently begin to hinder their development.* Although a given condition of the forces of production is the exciting cause of particular relations of production and, in especial, of particular property relations, these latter, when they have once come into being as the outcome of the before-mentioned cause, begin, in their turn, to affect this same cause. Thus there arises a system of action and reaction, of reciprocal interaction, between the forces of production and the economic system. On the other other, there builds itself up upon the economic foundation an entire superstructure of social relations and of appropriate feelings and ideas. Now, inasmuch as this superstructure, likewise, begins by favouring economic development, but comes in due course to hinder that development, here also there is established a system of mutual interaction between the superstructure and the foundation. This dispels the

* Consider slavery, for instance. At a certain level of development, it favours the growth of the forces of production, but subsequently it begins to hinder their growth. The disappearance of slavery in the civilised nations of the West is due to their economic evolution.—Concerning slavery in classical times, consult Professor E. Cicotti's interesting work, *Il tramonto della schiavitù*, Turin, 1899.—J. H. Speke, in his book, *Journal of the Discovery of the Sources of the Nile*, 1863, says that, among the negroes, slaves consider that to run away is to behave in a disgraceful way towards the master who has paid money for them. It should be added that these same slaves regard their situation as a more honourable one than that of a wage-earner. Such outlooks correspond to a phase of social evolution in which slavery is still a progressive phenomenon.

enigma which at first sight surrounds these phenomena and seems to conflict with the fundamental thesis of historical materialism.

All that has hitherto been said by the critics of Marx as regards the supposed one-sidedness of Marxism and its alleged disdain for any but the economic factors of social evolution is simply due to a misunderstanding of the part assigned by Marx and Engels to the reciprocal interactions between the foundation and the superstructure. Those who wish to convince themselves how little Marx and Engels were inclined to underestimate the importance of the political factor will find it enough to read the pages of the *Communist Manifesto* referring to the movement for the emancipation of the bourgeoisie. There we are told: "Each step in the development of the bourgeoisie was accompanied by a corresponding political advance. An oppressed class under the dominion of the feudal lords, it became an armed and self-governing association in the commune; here an independent republic, there the taxable 'third estate' under the monarchy; in the days of manufacture, the bourgeoisie was the counterpoise of the nobility in the semi-feudal or in the absolute monarchy, and was the corner-stone of great monarchies in general—to fight its way upwards in the end, after the rise of large-scale industry and the establishment of the world market, to exclusive political hegemony in the modern representative State. The modern State authority is nothing more than a committee for the administration of the consolidated affairs of the bourgeois class as a whole."

The importance of the political factor is here plainly disclosed, so plainly that some critics consider that it is unduly stressed. But the origin and the influence of this factor, together with the way in which it exerts its influence in any given period of the deve-

lopment of bourgeois society, are explained in the *Manifesto* by the course of economic development, and, consequently, though the factors vary in their nature, the initial determinant is always the same.

Indisputably, political relations influence economic development; but it is no less indisputable that, before influencing this movement, they are created thereby.

We have to say the same thing about the psychological conditions of man as a social being; to say the same thing of what Stammler called, somewhat one-sidedly, social concepts. The *Manifesto* shows beyond question that its authors were well aware of the importance of the ideological factor; but the same document shows that, even though the ideological factor plays an important part in the development of society, it is itself first of all created by this development.

"When the classical world was in its decline, the old religions were conquered by Christianity. When Christian ideas were put to flight by eighteenth-century rationalism, it was at the time when feudal society was fighting for very existence against the bourgeoisie, which was then the revolutionary class." But in the matter with which we are now concerned, the closing section of the *Manifesto* is even more convincing. Here we are told that the communists want to do all they can to impress upon the minds of the workers that there is an essential antagonism between the bourgeoisie and the proletariat. Assuredly one who has attached no importance whatever to the ideological factor would have no reason for trying to impress anything upon the minds of the members of any social group whatever.

X.

I have quoted the *Manifesto* in preference to other works by Marx and Engels because it was composed

during that early period of their activity when, according to some of their critics, they had an especially "one-sided" view of the relations between the various factors of social evolution. We see clearly, however, that, at this period no less than later, Marx and Engels were not characterised by a "one-sided way" of looking at things, but only by an inclination towards monism, by a strong hostility towards the eclecticism which is so obvious in their critics.

Reference has often been made to two letters written by Engels, one in 1890, and the other in 1894, published in the "Sozialistischer Akademiker." Bernstein makes much of these two letters, regarding them as plain proof of a change of views in Marx's friend and collaborator. He gives two extracts which seem to him of especial importance in this connection, and I shall myself quote them likewise, as proving the exact opposite of what Bernstein wants to prove.

Here is the first of these passages: "Consequently there exist innumerable forces which interlace, an infinite number of parallelograms of forces giving a resultant, the historical happening. This, in its turn, can be regarded as the outcome of a force acting as a whole, without consciousness or will. For that which each individual wishes separately, is hindered by all the others, and the general upshot is something which no one in particular has willed." (Letter of 1890.)

Here is the other extract: "Political, legal, philosophical, religious, literary, artistic, etc., development, is grounded upon economic development. But all of them react, conjointly and separately, one upon another, and upon the economic foundation." (Letter of 1894.)

According to Bernstein, "this sounds a very different note" from the preface to *Zur Kritik der politischen Oekonomie*, where we read about the link between the

economic foundation and the superstructure which is erected thereon. I cannot see the difference. The passage quoted above merely repeats what Marx said in the preface. Political development and other kinds of development are based upon economic development. Bernstein blunts the significance of the words "all of them react, conjointly and separately, one upon another, and upon the economic foundation." He put a different interpretation upon the preface to *Zur Kritik der politischen Oekonomie*, and thinks that when Marx speaks there of the social and ideological superstructure erected upon the economic foundation, he means to imply that the superstructure exerts no influence upon the foundation. We know perfectly well that there could not be a more erroneous way of interpreting Marx's thought. Those who have taken the trouble to watch Bernstein's "critical" exploits cannot but shrug their shoulders when they see how the man who undertook, at one time, to popularise Marxian doctrine has not taken the trouble to understand (or, to put the matter more accurately, is incapable of understanding) Marxian doctrines.

In the second of the two letters which Bernstein quotes, there are other passages, besides the one already given (the one which Bernstein understands so little), still more important, perhaps, in the light they throw upon the causal significance of Marx's and Engels' historical theory. One of these passages runs as follows: "There is, therefore, no automatic outcome of the economic situation as some find it convenient to fancy. Men make their own history, but in a given environment in which they live, upon the foundation of extant relations. Among these relations, economic relations, however great may be the influence exercised on them by other relations of a political and

ideological order, are those whose action is ultimately decisive, forming a red thread which runs through all the other relations and enables us to understand them."

Among those who interpret the historical doctrine of Marx and Engels as signifying that the economic situation works itself out automatically in the historical process, Bernstein, as we know, was numbered in the days when he was still "orthodox." Among them, too, we must class a great number of modern critics of Marx who have backslid "from Marxism to idealism." These profound thinkers are extremely pleased with themselves when they show, in opposition to the "one-sided" doctrine of Marx and Engels, that history is made by men and not by an automatic economic movement. They thus sacrifice to Marx his own goods, and never even suspect (so simple-minded are they) that the Marx whom they are criticising has nothing in common save the name with the true Marx. The Marx they are criticising is the creation of their own ignorance, which is indeed "many-sided." It is natural that critics of this order should be utterly incapable of supplementing or amending a jot or tittle of historical materialism. We need not trouble ourselves about them any more, and can return to the study of those who laid the foundations of the theory.

It is extremely important to note that when Engels, shortly before his death, repudiated the "automatic" way of looking upon the historical activity of economic influences, he was only repeating (almost in the same words) what Marx had written half a century before, in the third of the *Theses on Feuerbach*, in the passage I have reproduced above. There Marx complained of the earlier materialists because they had failed to take into account the fact that, if on the one hand, men are the products of environment, environment itself, on the

other hand, is modified by men. (See above, p. 22.) In Marx's view, therefore, the task of materialism in the domain of history was to explain exactly how environment can be modified by men who are themselves a product of this environment. He solved this problem by pointing to the relations of production which come into being under the working of conditions independent of the human will. The relations of production are relations established among human beings in the social process of production. To say that the relations of production are transformed, is to say that the relations between men engaged in the process of production are transformed. A change in these relations cannot occur "automatically," that is to say independently of human activity, because these relations are among those which come into being between men in the course of their activity.

But these relations can undergo transformation, and very often do undergo transformation, in a direction very different from that in which men would like to transform them. The character of the "economic structure" and the direction in which this character undergoes transformation do not depend upon the human will, but upon the condition of the forces of production, and upon the nature of the changes which occur in the relations of production and which become necessary to society owing to the development of these forces. Engels explains this as follows: "Men make their own history; but, hitherto, even within isolated societies, they have not done so as the outcome of a general will, or in accordance with a general plan. Their aspirations conflict one with another; and that is why, in all such societies, necessity rules—necessity, of which chance is the complement and the form under which it manifests itself." Here human activity exhi-

bits itself, not as free activity, but as necessary activity, that is to say in conformity with law and able to be subjected to scientific study. Thus historical materialism, while continually pointing out that the environment is modified by human beings, enables us for the first time to regard the course of this modification from a scientific standpoint. That is why we are entitled to say that the materialist conception of history is the essential preliminary to any sociological doctrine which can claim the title of science.

So true is this that, henceforward, no study of social life can have any scientific value except in proportion to the degree in which it inclines towards a materialist explanation of its topic. Despite the widely-trumpeted "revival of idealism" in sociology, materialist explanations are more and more in vogue wherever men of science, instead of giving themselves up to edifying meditations and grandiloquent discourses concerning the "ideal," devote themselves to the task of discovering the causal ties between phenomena. In actual fact, persons who, far from being open advocates of the materialist conception of history, have never even heard of it, none the less act as materialists in their historical researches. Thereupon, their ignorance of the materialist conception, or their prejudice against it, making it impossible for them to understand it in all its aspects, misleads them into the adoption of what we are entitled to call one-sided and narrow views.

XI

Here is an excellent example. In 1897, the famous French scientist, Alfred Espinas (a strong opponent, by the way, of contemporary socialism), published a work entitled *Etude sociologique, les origines de la technologie*, a most interesting book. Setting out from the purely materialist theory that, in the history of man-

kind, practice always goes before theory, he examines the influence of technique upon the development of ideology, that is to say of religion and philosophy, in ancient Greece. He reaches the conclusion that, in every period of this development, the ancient Greek conception of the world was determined by the condition of the forces of production. Beyond question, this is a very interesting and important result. But one who is accustomed to apply the materialist method to the understanding of historical phenomena will find that the idea expressed in Espinas' book is one-sided. It is one-sided for the simple reason that the French savant has paid no attention to supplementary factors of the development of ideology, such as, for example, the class struggle. Yet this factor is of very great importance.

In primitive society, where class divisions do not yet exist, productive activity has a direct influence upon the conception of the universe and upon æsthetic taste. Decorative art draws its motifs from technique; and dancing, which is perhaps the most important of the arts in such a society, is usually content to mimic one of the processes of production. This is especially obvious in hunting tribes at the lowest level of economic development accessible to our observation.* That is why I have directed my readers' attention mainly to these tribes when discussing the way in which primitive man's mental condition is dependent upon his economic activity.³² When we are concerned with a society divided into classes, the direct influence of economic activity upon ideology is far less obvious. We can

* Before hunting tribes came into existence, they had passed through the stage of tribes that lived by picking fruits and collecting roots ("Sammelvölker," as German sociologists call them). But all extant savage peoples have passed beyond this extremely primitive phase of development.

easily understand why this should be so. If, for instance, the dance performed by Australian Blackfellows is a reproduction of the activities of the same tribesmen when engaged in collecting roots, we know where we are; but a dance on the part of fine ladies in eighteenth-century France could not, of course, be a representation of their productive activities, seeing that they had no such activities, and preferred to devote themselves to "the science of love." If we want to understand a dance performed by Australian indigens, it suffices that we should know what part is played by the women of the tribe in collecting the roots of wild plants. But a knowledge of the economic life of France in the eighteenth-century will not explain to us the origin of the minuet. In the latter case we have to do with a dance which is an expression of the psychology of a non-productive class. Most of the habits and customs of what is called good society depend upon the same sort of psychology. Here, then, the economic factor yields place to the psychological factor. We must not forget, however, that the appearance of non-productive classes in a society is itself the outcome of the economic development of that society. This means that the economic factor remains predominant, even when its activity is overlaid by that of other factors. In truth, then only does its significance become conspicuous, for then it determines the possibility of the working of other factors and the limits of their influence.*

* Here is an example drawn from another field. The "population factor" (to use the expression coined by A. Coste, in his book, *Les facteurs de population dans l'évolution sociale*, Paris, 1910) undoubtedly exerts considerable influence upon social development. But Marx is perfectly right when he says that abstract laws of population apply only to lower animals and to plants. The increase or diminution of population in human society depends upon the organisation of that society, an organisation which is

Nor is this all. The upper class, even when it participates as the ruling class in a process of production, regards the lower class with undisguised contempt. This is plainly manifested in the ideology of both classes.

The medieval French fabliaux (metrical tales), and especially the chansons de geste, present the peasants of those days in a most repulsive light. If we are to believe them :

Li vilaen sont de laide forme,
Ainc si tres laide ne vit home;
Chaucuns a XV piez de granz;
En augues ressemblent jâianz,
Mais trop sont de laide manière.
Boçu sont devant et derrière.*

As may be imagined, the peasants themselves had a very different idea. Infuriated by the arrogance of the feudal seigneurs, they sang :

Nous sommes des hommes, tout comme eux,
Et capable de souffrir, tout autant qu'eux.†

itself determined by the economic structure of the society. No abstract "law of population" will explain why the population of modern France has become stationary. The sociologists and economists who regard increase of population as the primary cause of social evolution are profoundly mistaken. (Cf. A. Loria, *La legge di popolazione ed il sistema sociale*, Siena, 1882.)

* The villeins [serfs, peasants] are very ugly,
An uglier set of men you cannot find;
Fifteen feet high, each of them;
Some just like giants,
But much too ugly,
And humped both before and behind.

Cf. Henri Sée *Les classes rurales et le régime domanial en France au moyen âge*, Paris, 1901, p. 551. See also F. Meyer, *Die Stände, ihr Leben und Treiben*, Marburg, 1882, p. 8.

† We are men, just as they are,
And able to suffer, just like them.

They enquired: "When Adam delved and Eve span, who was then the gentleman?"

In a word, each of the two classes looked at things from its point of view, the outlook being determined by the situation of the respective classes in society. The class struggle put its imprint upon the psychology of the contending sides. It need hardly be said that this happens at other times as well as in the Middle Ages, and in other countries besides France. The fiercer the class struggle becomes in a given place and at a given time, the more marked is its influence upon the psychology of the warring classes. Any one who wishes to study the history of ideologies in a society divided into classes must pay close attention to this influence, for otherwise he will understand nothing about the matter. If you try to give a direct economic explanation of the appearance of the school of David in French painting at the close of the eighteenth century, you will certainly talk nonsense. But if, on the other hand, you regard this school as an ideological reflection of the class struggle which was going on in French society on the eve of the great revolution, the problem will assume an entirely new aspect. Then certain qualities of David's art which might have seemed to have no connection with social economy, will become perfectly comprehensible.³³

The same thing may be said of the history of the ideologies of ancient Greece, for here the influence of the class struggle is well marked. That is the very influence which Espinas has to a large extent overlooked in his interesting study, so that his conclusions, important though they are, are unduly one-sided.

Numerous additional instances might be quoted, and all of them would show that Marxian materialism would be of the greatest possible use to many investi-

gators, in that it would teach them to take into consideration other factors besides technical and economic factors. This statement may seem paradoxical, and yet it embodies an undeniable truth, which will cease to surprise us if we recall that Marx, although he explains all social movements as the outcome of the economic development of the society concerned, only explains them thus in the last analysis, for he always implies that a considerable number of intermediate factors are operative.

XII.

In modern science a new trend, diametrically opposed to that we have just been considering as manifested by Espinas, is now beginning to become apparent. I refer to the tendency to explain the history of ideas as exclusively due to the working of the class struggle. This new trend, not as yet very conspicuous, has developed under the direct influence of Marxian historical materialism. We find it, for instance, in the writings of the Greek author A. Eleutheropoulos, whose principal work, *Wirtschaft und Philosophie* (Vol. I., *Die Philosophie und die Lebensauffassung des Griechentums auf Grund der gesellschaftlichen Zustände*, and Vol. II., *Die Philosophie und die Lebensauffassung der germanisch-römischen Völker*) was published at Berlin in the year 1900. Eleutheropoulos contends that the philosophy of every epoch expresses the outlook on the universe and on life proper to that epoch. This is not a new theory. Hegel already pointed out that every system of philosophy is nothing more than the ideological expression of its time. But, in Hegel's view, the peculiarities of the different epochs, and, consequently, the corresponding phases in the development of philosophy, were determined by the movement of the absolute idea. According to Eleutheropoulos, on the other

hand, every epoch is mainly characterised by its economic condition. The economic life of each nation determines the philosophy of that nation; or, rather, determines its outlook on the world, which finds expression in its philosophy. As the economic foundation of the society undergoes changes, there is a concomitant change in the ideological superstructure. Since, however, economic evolution leads to the severance of society into classes, and to a struggle between these classes, the outlook on the world and on life characteristic of a given epoch cannot have a uniform character. It must differ from class to class, and must undergo modifications in accordance with the needs and the aspirations of the classes, and in accordance with the vicissitudes of the class struggle.

Such is Eleutheropoulos' theory of the history of philosophy. His views demand close attention, and must, in general, be heartily approved. For a considerable time, there has been apparent in philosophical literature an inclination to discountenance the old method, that of those who regarded the history of philosophy as nothing more than a simple affiliation of philosophical systems. In a handbook published in 1888, devoted to the question of the best way of studying the history of philosophy, Picavet, a well-known French writer, declared that this theory of affiliation explained very little.* The publication of Eleutheropoulos' book can be hailed as a marked advance in the study of the history of philosophy, and as a victory of historical materialism in its application to one of the ideologies most remote from economics. Unfortunately, however, Eleutheropoulos does not show much skill in the management of the dialectical method of this materialism. He has simplified the pro-

* *L'histoire de la philosophie, ce qu'elle a été, ce qu'elle peut être*, Paris, 1888.

blems unduly and has therefore arrived at extremely one-sided and unsatisfactory conclusions.

Take the account of Xenophanes, for example. According to Eleutheropoulos, Xenophanes was in philosophy the interpreter of the aspirations of the proletariat in ancient Greece, was the Rousseau of his day.* He was an advocate of social reform, desiring that all citizens should be equal, and his theory of the unity of the world was merely the theoretical foundation of his schemes of reform.† Upon this theoretical foundation, all Xenophanes' aspirations towards reform were built up, in accordance with a logical scheme; all the details of his philosophy, beginning with his idea as to the nature of God and ending with his theory that our senses give us no more than an illusory representation of the outer world.‡

The philosophy of Heraclitus the Obscure was brought into being, says Eleutheropoulos, by the reaction of the aristocrats against the revolutionary aspirations of the Greek proletariat. Universal equality is impossible; nature herself has made men unequal. Every one ought to be content with his lot. In the State we must try, not to upset the established order, but to put an end to the arbitrary use of power, which is equally possible under the rule of a few and under the rule of the masses. Power ought to be exercised in accordance with law, in which the divine law finds expression. The divine law does not exclude unity; but the unity which conforms to this law is the unity of antagonisms. That is why the realisation of Xenophanes' plans would be a breach of the divine law. It was in the development of this thought, and in his endeavour to

* *Wirtschaft und Philosophie*, Vol. I, p. 98.

† *Ibid.*, p. 99.

‡ *Ibid.*, pp. 99-101.

substantiate it, that Heraclitus formulated his dialectical doctrine of becoming.*

Such are the views of Eleutheropoulos. For lack of space I cannot give further samples of his analysis of the causes that have determined the evolution of philosophy. Nor is there any need. The reader will, I hope, see for himself that the analysis is unsatisfactory. The fact is that the evolution of ideologies is a far less simple matter than Eleutheropoulos imagines.† When we read his far too elementary notions concerning the influence of the class struggle on the history of philosophy, we cannot but regret that Eleutheropoulos has not read the before-mentioned work by Espinas. That author's one-sidedness might perhaps have served to correct his own one-sidedness.

Nevertheless, Eleutheropoulos' unsuccessful attempt to throw light on the history of philosophy from the outlook of historical materialism provides a fresh argument in favour of the thesis (which will seem strange to many) that a deeper knowledge of Marxian historical materialism would be of great value to many contemporary scientists, inasmuch as it would save them from lapsing into a one-sided way of looking at the topics they are studying. Eleutheropoulos is acquainted with Marxian historical materialism, but his acquaintance is altogether inadequate, as is shown by the fact that he wants to "rectify" it after his own fashion.

He tells us that the economic relations of a given people only determine "the necessity of its development." The development itself is an individual matter, in this sense, that the people's outlook on the world is

* *Ibid.*, pp. 103-107.

† To say nothing of the fact that, in his account of the economic life of ancient Greece, Eleutheropoulos gives no concrete data, and confines himself to generalities which, as usual, explain nothing.

primarily determined by his its character and by the character of the country it inhabits; secondly by the needs of the people; and, thirdly, by the individual qualities of the men in it who play the part of reformers. It is only in this sense, Eleutheropoulos tells us, that we can speak of a relation between philosophy and economics. Philosophy (he says) fulfils the demands of its time, and it does this conformably with the personality of the philosopher.

Manifestly Eleutheropoulos considers that his view of the relations between philosophy and economics is something altogether new as compared with the materialist view of Marx and Engels. He considers it necessary to give a new name to his interpretation of history, which he calls "the Greek theory of becoming."* This is really ludicrous, and all one can say is that the Greek theory of becoming is nothing more than historical materialism, rather badly digested, and expounded in an extremely vague way. Moreover, Eleutheropoulos' promise is a great deal better than his performance, when he passes from the characterisation of his method to its application, for then he cuts quite adrift from Marx.

In particular, as regards the "personality of the philosopher," and, in general, as regards the personality of every one who leaves footprints on the sands of time, it is a great mistake to suppose that the theory of Marx and Engels makes no allowance for personality. That theory certainly has room for the influence of personality. But, at the same time, Marx and Engels would never have dreamed of contraposing the activity of "personality" to the "march of events," this latter being determined by economic necessity. Any one who can imagine that there is an opposition of the kind,

* *Ibid.*, p. 17.

shows thereby that he can have understood very little of the materialist conception of history. The primary thesis of materialism, as I have said again and again, is that history is made by human beings. Now, if it is made by human beings, it must obviously be made by "great men" among the rest. Our problem is, then, to find out by what the activity of these men is determined. In this connection, Engels writes in one of the letters part of which was quoted above :

" It is naturally a matter of pure chance that a particular man, and no other, should come to the front at a given time and in a given country. But if we were to suppress this individual, a substitute for him would be needed, and a substitute of one sort or another would be forthcoming in the end. It was a chance matter that the military dictator needed by the French republic, when exhausted by years of warfare, should have been Napoleon, the Corsican. But that, in default of Napoleon, some other dictator would have taken his place, is proved by the fact that the necessary individual, Julius Cæsar, Augustus, Cromwell, or another, has always been forthcoming when needed. Marx, indeed, discovered the materialist conception of history, but the examples of Thierry, Mignet, Guizot, and all the English historians down to 1850, show that people were tending towards this result; whilst the discovery of the same notion by Morgan shows that the time was ripe, and that the discovery had become necessary. The same consideration applies to all the chances, or what appear to be chances, of history. The more distant the field we are exploring is from economics, and the more it assumes an abstract ideological character, the greater seems the influence of chance in what happens, the more zigzag the curve. But if you trace the mean axis of this curve, you will find that, in proportion as you trace it for a longer time and through a larger area,

the axis tends to run parallel to that of economic evolution."*

The personality of every one who has attained eminence in the intellectual or social field belongs to those chances whose appearance does not conflict in any way with the tendency of the average line of the intellectual development of mankind to follow a course parallel to that of its economic evolution.† Eleutheropoulos would have paid more attention to the foregoing considerations if he had studied Marx's historical theory more carefully and had been less eager to formulate his own "Greek theory."‡

It would be superfluous to insist that we are far, as yet, from being in a position to discover in every case the causal tie between the appearance of a philosophical idea and the economic situation of the period in which the idea originates. That is because we have only just begun to study these relations; whereas if we were in a position to answer all the questions that force themselves upon us, or even most of them, this would mean that we were nearing the end of our work. It is of no consequence that we cannot yet overcome all the difficulties with which we are faced. No method can suddenly overcome all difficulties. What matters is that the materialist conception of history enables us to overcome our difficulties far more readily than do idealist and eclectic conceptions. This is shown by the fact that scientific thought in the historical field

* "Der sozialistische Akademiker," Berlin, 1895, No. 20, p. 374.

† See my article entitled *The Role of Personality in History*.—*Works*, Vol. VIII.

‡ He has called his theory a "Greek" theory because, according to him, its fundamentals were already formulated by Thales, the ancient Greek philosopher, and have been further developed by a modern Greek philosopher, Eleutheropoulos. (*Op. cit.*, p.17.)

has been tending more and more towards a materialist explanation of phenomena, such as it has been persistently seeking since the Restoration period in the second and third decades of the nineteenth century.* That is the trend of history notwithstanding the fine indignation which overcomes every self-respecting bourgeois spokesman as soon as he hears the word "materialism."

Franz Feuerherd's book entitled *Die Entstehung der Stile aus der politischen Oekonomie*, Part I., *Die bildende Kunst der Griechen und Römer*, Leipzig, 1902, can serve as a third example of the way in which materialist explanations are gaining ground throughout all the domains of human culture. Feuerherd writes: "The human intelligence develops in directions determined by the institutions of everyday life, the dominant method of production and by the form of State conditioned thereby, for any other directions are closed paths. That is why the existence of any style [in art] presupposes the existence of men living in determinate political conditions, producing goods in accordance with a determinate method of production and animated by determinate ideals. These preliminary conditions being given, men create styles in conformity therewith, doing so as necessarily and inevitably as linen bleaches, as bromide of silver turns black and as the rainbow appears in the clouds—when the sun, which is the cause of these effects, produces them."† All this is true, and we cannot but be interested that a writer of the history of art should recognise as much. But when Feuerherd goes on to explain the origin of the various artistic styles of ancient Greece as the outcome of economic conditions, he systematises far too much. I do

* See the preface to the second edition of my Russian translation of the *Communist Manifesto*.

† *Op. cit.*, pp. 19-20.

not know if the second part of his book has yet been published. Nor should I be interested to read it, since the first part has shown me how ill-informed he is regarding the modern materialist method. His arguments recall those of our own doctrinaires, Friche and Rozhkov, who may be advised, like Feuerherd, to study contemporary materialism. Marxism alone can save them from lapsing into excessive systematism.

XIII.

The late Nikolai Mikhailovsky declared, in his controversy with myself, that Marx's historical theory would never have much vogue in the scientific world. What I have just been quoting, and what I am about to quote, show that Mikhailovsky was wrong. But before I go on to these other quotations I wish to clear away certain misunderstandings which interfere with a true knowledge of historical materialism.

If we wish to summarise the views of Marx and Engels on the relation between the famous "foundation" and the no less famous "superstructure," we shall get something like this :

1. The state of the forces of production;
2. Economic relations conditioned by these forces;
3. The socio-political regime erected upon a given economic foundation;
4. The psychology of man in society, determined in part directly by economic conditions, and in part by the whole socio-political regime erected upon the economic foundation;
5. Various ideologies reflecting this psychology.

The formula is sufficiently comprehensive to embrace all the forms of historical development. At the same time it is utterly alien to the eclecticism which cannot get beyond the idea of a reciprocal action be-

tween the various social forces and does not realise that such reciprocal action between forces cannot solve the problem of their origin. Our formula is a monistic formula, and this monistic formula is impregnated with materialism. In his *Philosophy of Spirit* Hegel said: "Spirit [Mind] is the only motive principle of history." We cannot take any other view if we accept that idealist standpoint according to which being is determined by thought. Marxian materialism shows how the history of thought is determined by the history of being. But idealism did not prevent Hegel from recognising that economic conditions were causes "which become effective through the instrumentality of the development of the spirit." In the same way, materialism did not prevent Marx from recognising that in history "spirit" acted as a force whose direction, at any given moment, was determined by the development of economic conditions.

It is easy to understand that all ideologies have a common root in the psychology of the epoch to which they belong. Even the most superficial study of the facts will enable the observer to convince himself of this. As one instance among many, I will mention French romanticism. Victor Hugo, Eugène Delacroix and Hector Berlioz worked in three entirely distinct artistic fields and were very different from one another in many ways. Victor Hugo had no love for music; Delacroix despised romanticist musicians. None the less, it is with good reason that these three notable men have been spoken of as the romanticist trinity, for one and the same psychology finds expression in their works. We may say that Delacroix's picture *Dante and Virgil* expresses the same frame of mind as that which made Victor Hugo write *Hernani* and Berlioz compose his *Symphonie fantastique*. Their contemporaries—

those among them who were seriously interested in literature and art—felt this. Ingres, whose tastes were classical, called Berlioz “the abominable musician, the bandit, antichrist.”* This reminds us of the unflattering opinions which the lovers of classical painting expressed of Delacroix, who, they said, painted with a “drunken broom.” Every one knows that Berlioz, like Victor Hugo, was fiercely attacked.† Every one knows, too, that he only made good after tremendous efforts, much more strenuous than those of Victor Hugo; and that his success came much later than Hugo’s. Why was this, although the psychology which his music voiced was identical with that which found expression in romanticist poetry and drama? To answer the question, we must take into account numerous details in the comparative history of French music and French literature,‡ details many of which will perhaps never find a full explanation. This much, however, is indubitable, that the psychology of French romanticism will only become comprehensible to us when we consider it as the psychology of a particular class existing under particular social and historical conditions.§

* See *Souvenirs d’un hugolâtre*, by Augustin Challamel, Paris, 1885, p. 259.—Ingres was more consistent than Delacroix, who, though a romanticist in painting, had retained a predilection for classical music.

† See Challamel’s book, p. 258.

‡ Especially in the history of the part played by these respective arts as interpreters of the state of mind of the epoch. We know that in different epochs, different ideologies and different ideological departments come to the front. During the Middle Ages, theology played a far more important part than it does to-day. In primitive society, dancing was the most important of the arts, whereas now it is far from being this. And so on.

§ In Chesneau’s work, *Les chefs d’école*, Paris, 1883, pp. 378-379, we find an extremely acute observation con-

J. Tiersot wrote: "The movement of 1830 in literature and art was far from having the characteristics of a popular revolution."* That is perfectly true. The movement in question was essentially bourgeois. But it is not the whole truth. Among the bourgeoisie, this movement did not by any means attract universal sympathy. According to Tiersot, the movement expressed the aspirations of a small group of "elect" sufficiently far-sighted to know how to discover genius in its lurking-place.† Arguing from this superficially, that is to say idealistically, Tiersot infers that the French bourgeoisie of that epoch failed to understand a considerable part of the aspirations and sentiments which then animated its own spokesmen in literature and art. Such a discordance between ideologists and the class whose trends and tastes they express, is by no means rare in history and serves to explain many peculiarities in the cerning the psychology of the romanticists. The author points out that romanticism made its appearance soon after the days of the revolution and the empire. "In literature and art there was a crisis similar to that which occurred in morals after the Reign of Terror—a veritable crisis of the senses. People had been living in a condition of perpetual fear. When their fear was over, they abandoned themselves to the pleasures of life. Their attention was entirely engrossed in external appearances, in outward forms. The blue heaven, the splendour of sunlight, the beauty of women, sumptuous velvets, iridescent silks, the sheen of gold, the sparkle of diamonds—these were the things that filled them with delight. People lived only with the eyes, and had given up thinking." In many respects this resembles the psychology of the period which we are now [the years immediately after 1905] passing in Russia. But the march of events which was the cause of this state of mind was itself determined by the march of economic evolution.

* *Hector Berlioz et la société de son temps*, Paris, 1904, p. 190.

† *Ibid.*, p. 190.

intellectual development of mankind. In the case with which we are now dealing it was responsible for, among other things, the contemptuous attitude of the "refined elite" for the bourgeois of "common clay"—an attitude which still leads simple folk astray and prevents their understanding the essentially bourgeois character of romanticism.* But here, as everywhere, the origin and the character of such a discrepancy can only be explained, in the last analysis, by the economic situation of the social class in which it manifests itself. Here, as everywhere, being, and nothing else, throws light on the "secrets" of thought. That is why, here as everywhere, nothing but materialism can give a truly scientific explanation of the "march of ideas."

XIV.

In their efforts to explain this march idealists have never realised the need to watch closely the course of things. For instance, Taine explains the origin of works of art by the characteristics of the environment which surrounds the artist. But what characteristics does he refer to? To psychological characteristics, to the general psychology which prevails at a given epoch, that general psychology whose characteristics themselves stand in need of explanation† Materialism, when it explains the psychology of a society or of a particular class, looks to the social structure created by economic development; but Taine, who is an idealist, explained the origin of the social regime by social psychology, a method which led him into a hopeless tangle of contradiction. In no country, nowadays, do the idealists show much fond-

* Here we have the same confusion of thought as that which makes the disciples of the arch-bourgeois Nietzsche extremely quaint when they attack the bourgeoisie.

† "A work of art," writes Taine, "is determined by an ensemble which is the general state of mind and of environing custom."

ness for Taine. The reason is obvious. When he spoke of "environment" he meant the psychology of the masses, the psychology of the average man, in a particular epoch and in a particular class; and according to him this psychology is for the scientist the last court of appeal. Consequently, in Taine's view, the "great" man thinks and feels under the inspiration of the average man, under the inspiration of mediocrities. Now, not only is this not the case, but also the idea is distasteful to bourgeois intellectuals, who are always inclined, more or less, to regard themselves as belonging to the category of great men. Taine was like the man who, having said A, was unable to go on and say B, thus ruining his own case. The only escape from the contradictions in which he had become involved would have been by way of historical materialism, which leaves adequate scope both for personality and for the environment, both for average individuals and for the great men who are "singled out by destiny."

From the Middle Ages down to 1871, of all the countries in western Europe, France was the one in which social and political evolution and the struggle between the various social classes assumed the most typical form—most typical for western Europe. So much having been said, it is interesting to note that in France, above all, we can most readily discover the causal nexus between the course of social development and the before-mentioned struggle, on the one hand, and the history of ideologies on the other.

Discussing the reason why, during the Restoration period in France, the ideas of the theocratic school concerning the philosophy of history became so widely diffused, Robert Flint remarks: "The success of such a theory . . . would have been inexplicable, had not the way for it been prepared by the sensationalism of

Condillac, and had it not been so obviously fitted to serve the interests of a party which represented the opinions of large classes of French society before and after the Restoration.”* This is obviously true. Nor can there be any difficulty in recognising which class it was whose interests secured ideological expression in the doctrines of the theocratic school. But, pursuing our study of French history, let us ask ourselves whether it is not equally possible to discover the social causes of the success of sensationalism in pre-revolutionary France. Did not the intellectual movement out of which the theoreticians of sensationalism sprang express in its turn the tendencies of a particular social class? Certainly this was so. The sensationalist movement was the expression of the trend of the French third estate towards emancipation.³⁴ If we were to proceed further in this direction, we should see that, for instance, Descartes’ philosophy gives a clear reflection of the necessities of economic evolution and of the relation of social forces in his time.† Finally, if we go back to the fourteenth century, and consider the romances of chivalry which had so striking a success at the French court and among the French aristocracy of that epoch, we shall see once more that these romances mirrored the life and the tastes of the class in question.‡ In this remarkable country, which quite recently was still

* *The Philosophy of History in France and Germany*, 1874, p. 149.

† See G. Lanson’s *Historie de la littérature française*, Paris, 1896, pp. 394-397. Here you will find a good account of the links between certain aspects of Descartes’ philosophy and the psychology of the ruling class in France during the first half of the eighteenth century.

‡ In his *Histoire des Français*, Vol. I, p. 59, Sismondi has expressed interesting views concerning the significance of these romances, views which furnish material for the sociological study of imitation.³⁵

entitled to say that it "marched at the head of the nations," the curve of the intellectual movement runs parallel with the curve of economic development and with the curve of social and political development which is conditioned by economic development. That is why the history of ideology in France is of especial interest to sociologists.

The gentry who have "criticised" Marx in various tones knew nothing about these matters. They never dreamed that, though no one doubts that criticism is an excellent and praiseworthy thing, it is expedient that a critic should understand what he is criticising. To criticise a given method of scientific investigation enables us to decide how far it is competent to discover the causal links between phenomena. But this can only be ascertained by experience, by the application of the method. To criticise historical materialism, we must make actual trial of the method of Marx and Engels, must turn it to practical account in the study of the historical movement of mankind. There is no other way of discovering its strong and its weak points. As Engels said when explaining his theory of cognition, "the proof of the pudding is in the eating." Exactly the same thing applies to historical materialism. One who would criticise the dish, must first of all have tasted it. But one who would taste, one who would try the method of Marx and Engels, must know how to use it. Now, to use it skilfully demands serious preliminary work in the scientific field, sustained intellectual labour, rather than the utterance of eloquent pseudo-critical discourses concerning the one-sidedness of Marxism.

Marx's critics declare, some regretfully, some in the mood of those who discern a stigma, and some with malicious joy, that hitherto not a single book has been

published supplying a theoretical justification for historical materialism. When they speak of such a book, they are generally thinking of some sort of abridged treatise of universal history penned from the materialist outlook. But at present such a treatise could not be written by any isolated investigator, however universal his knowledge, nor yet by a group of investigators. Sufficient materials for its compilation do not as yet exist, and will not exist for a long time to come. The materials requisite can only be accumulated as the upshot of a lengthy series of investigations carried out in the appropriate branches of science with the aid of the Marxian method. In other words, the critics who clamour for such a book want the work to be begun at the wrong end. They are asking for a preliminary explanation from the materialist standpoint of that very process of history which has primarily to be explained. In actual fact, the work is being written in proportion to the degree in which contemporary scientists (unwittingly, for the most part, as I have already said) find themselves compelled by the actual condition of sociology to discover materialist explanations of the phenomena they are studying. The examples I have already quoted are enough to show that there are already a good many such scientists.

Laplace said that after Newton's great discovery fifty years passed before it was supplemented by other important discoveries. So long a time was needed before the primary truth could be generally understood, could overcome the obstacles in its way—the [Cartesian] theory of vortices, and perhaps also the vanity of contemporary mathematicians.*

The obstacles in the way of modern materialism,

* *Exposition du système du monde*, Paris, Year IV, Vol. II, pp. 291-292.

as a harmonious and consistent theory, are enormously greater than those which were encountered by Newton's theory of gravitation. Against modern materialism is directly and stubbornly ranged the interest of the ruling class, to whose influence the majority of contemporary scientists are necessarily subjected. Materialist dialectic, "which does not make obeisance to anything, and considers things under their transitory aspect," cannot possibly be regarded sympathetically by the conservative class—which, in the western world to-day, is the bourgeoisie. Modern materialism is so flatly opposed to the mental state of this class that bourgeois ideologists naturally regard it as intolerable and improper; as something which is unworthy of orderly-minded people in general and of respectable men of science in particular.* It is not surprising that all these respectable men of science consider themselves morally obliged to free themselves from any suspicion of sympathy for materialism. Often enough, they denounce it all the more vehemently in proportion to the degree to which, in their own special researches, they incline to adopt a materialist outlook.†

* Concerning this matter, see Engels' above-mentioned article, *Ueber den historischen Materialismus*.

† The reader may remember how fiercely Lamprecht defended himself against the accusation of materialism. Consider also Ratzel's repudiation of materialism in his book *Die Erde und das Leben*, p. 631. Nevertheless this same Ratzel had written: "All the cultural acquirements of every people at every stage of its development consist of material and spiritual elements. . . . They are not acquired with identical means, with equal facility, and in the same time, by all . . . Underlying intellectual acquirements are material acquirements. Creations of the mind only make their appearance, as luxuries, after material needs have been satisfied. Consequently, every question concerning the origin of civilisation leads back to

The outcome is a sort of "conventional lie," uttered half-consciously, which cannot fail to have a most harmful effect upon thought.

XV.

The "conventional lie" of a society divided into classes assumes proportions which are all the more extensive according as the existing order of things is endangered through economic evolution and by the working of the class struggle which is the outcome of that evolution. Marx said very truly that the greater the development of antagonisms between the growing forces of production and the extant social order, the more does the ideology of the ruling class become permeated with hypocrisy. In addition, the more effectively life unveils the mendacious character of this ideology, the more does the language used by the dominant class become sublime and virtuous. (See *Saint Max, Dokumente des Sozialismus*, August, 1904, pp. 370-371.) This shrewd remark is confirmed by what is going on to-day in Germany. The spread of debauchery disclosed by the Harden-Moltke trial proceeds hand-in-hand with the "revival of idealism" in sociology. Here in Russia, too, even among the "theoreticians of the proletariat," we find persons who do not understand the social cause of this "revival" and are subject to its influence. I am thinking of Bogdanov, Bazarov, etc.

However, the advantages which every investigator can derive from the Marxian method are so great that they are beginning to be openly avowed even by the question of the factors that favour the development of the material groundwork of civilisation." (*Völkerkunde*, Vol. I, first edition, p. 17.) This doctrine is indisputably historical materialism, though far less profoundly thought out, and therefore at a much lower level, than the materialism of Marx and Engels.

persons who have in other respects succumbed to the "conventional lie" of our time. Among these persons I may mention, for instance, Seligman, the American, author of a book entitled *The Economic Interpretation of History*, published in 1902. Seligman frankly admits that what made other scientific investigators fight shy of the theory of historical materialism was the socialist deduction drawn from that theory by Marx. He considers, however, that we can make the omelette without breaking the eggs; that "one can be an 'economic materialist' and yet remain an extreme individualist." He goes on: "The fact that Marx's economics may be defective has no bearing on the truth or falsity of his philosophy of history."*

In actual fact, Marx's economic views are intimately intertwined with his historical views. No one can properly understand *Capital* without having thoroughly grasped the doctrines in the famous preface to the earlier book, *Zur Kritik der politischen Oekonomie*. This, however, is not the place for an exposition of Marx's economic views, or for demonstrating the indisputable fact that these doctrines are an integral part of the doctrine known as historical materialism.† Let me add that Seligman, too, is sufficiently "respectable" to be afraid of materialism. This

* See pp. 24 and 109 of *The Economic Interpretation of History*.

† A few words in explanation of what is said in the text. According to Marx, "economic categories are only the theoretical expressions, the abstractions, of the social relations of production" (*Misère de la philosophie*, Part II, Note 2). This means that Marx looks upon economic categories likewise from the outlook of the mutual relations between men engaged in the social process of production, relations whose evolution supplies for him the explanation of the main lines of the historical movement of mankind.

advocate of economic materialism considers that things are pushed to an intolerable extreme by those who have "sought the explanation of Christianity itself in economic facts alone."* All this shows clearly how deep-rooted are such prejudices and how formidable, therefore, are the obstacles to be encountered by Marxian theory. Nevertheless, the very fact that Seligman's book has been written, and the nature of the author's reserves, give some ground for a belief that historical materialism—though it be in a truncated and "purified" form—will in the end be endorsed by those bourgeois ideologists who have not yet utterly renounced the hope of establishing order in their outlooks on history.†

But the struggle against socialism, materialism and other disagreeable extremist doctrines presupposes the existence of a "spiritual arm." This spiritual arm for the fight against socialism is, above all, what is called "subjective political economy," supplemented by more

* *The Economic Interpretation of History*, p. 137.—Kautsky's book, *The Origin of Christianity*, being a book of this "extreme" kind, obviously comes within range of Seligman's censure.

† Here we can draw an instructive parallel. According to Marx, materialist dialectic, when explaining that which exists, explains at the same time its inevitable disappearance. That is where, according to Marx, materialist dialectic is of so much value from the point of view of progress. But Seligman says: "Socialism is a theory of what ought to be; historical materialism is a theory of what has been." (*Ibid*, p. 108.) That is the only reason why Seligman finds it possible to defend historical materialism. This amounts to saying that we can ignore materialism in so far as it explains the inevitable disappearance of the extant, but can use it to explain that which has existed in the past. Here we have one of the numerous instances of "bookkeeping by double-entry" in the ideological domain, a variety of bookkeeping brought into being by economic causes.

or less adroitly cooked statistics. The main fortress in the struggle against materialism is represented by all the possible varieties of Kantianism. In sociology the weapon used is anti-Kantianism as a dualist doctrine which ruptures the tie between being and thought. Since a study of economic questions does not come within the scope of this book, I shall content myself with an examination of the philosophic arm used by the bourgeois reaction in the ideological domain.

At the close of his booklet, *Socialism Utopian and Scientific*, Engels remarks that when the powerful means of production created by the capitalist epoch have become social property, and when production has been organised in a manner conformable to social needs, men will become masters of social organisation and will therefore at long last become masters of nature and themselves. Then only will they begin consciously to make their own history; then only will the social causes set in action by them tend more and more to produce effects desirable for them. "Humanity will leap from the kingdom of necessity into the kingdom of freedom."

These words of Engels have aroused the hostility of all those who, being in general refractory to the idea of "jumps," cannot or will not understand the possibility of any such jump from the kingdom of necessity into the kingdom of freedom. It seems to them that such a jump is actually in contradiction with the view concerning freedom which Engels himself formulated in the first part of his *Anti-Dühring*. If we are to explain the confusion of ideas that prevails upon this subject, we must recall what Engels wrote in that book.

Explaining Hegel's words: "Necessity is only blind in so far as it is not understood," Engels declared that

freedom consists "in the empire exercised over ourselves and over external nature, an empire based upon a knowledge of the inherent necessities of nature."* Engels has developed this idea in a way that is sufficiently clear for those who are familiar with the doctrine of Hegel to which he refers. But the unfortunate thing is that modern Kantians are content to "criticise" Hegel without studying him. Since they do not know Hegel, they cannot understand Engels. Criticising the latter, they declare that there cannot be freedom where there is submission to necessity. Such a view is perfectly sound on the part of persons whose philosophical ideas are impregnated by a dualism which makes it impossible for them to unify thought and being. From the standpoint of this materialism, the "jump" from necessity to freedom is unquestionably incomprehensible. But Marx's philosophy, like Feuerbach's, proclaims the unity of being and thought. Although (as we have already seen, when studying Feuerbach's views) Marx understands this unity in a different sense from that in which it was understood by the champion of absolute idealism, his philosophy does not differentiate itself from Hegelian theory in the matter with which we are now concerned, in the matter of the relation between freedom and necessity.

The whole question turns on the meaning of what precisely we are to understand by necessity. Aristotle† had already pointed out that the concept of necessity has numerous shades of meaning. It is necessary to take medicine in order to be cured; it is necessary to breathe in order to live; it is necessary to travel to Aegina in order to get back the money that has been lent to some one there. These are what may be

* *Herrn Eugen Dührings Umwälzung der Wissenschaft*, 5th edition, p. 113.

† *Metaphysics*, Book V, chapter 5.

called conditional necessities; we must breathe, if we wish to live; we must take a medicine, if we wish to get rid of an illness, and so on. Man, in the course of the actions he exerts upon nature outside himself, has constantly to do with necessities of this order. It is necessary to sow, if we wish in due course to reap; to discharge an arrow, if we wish to kill the deer; to provide a store of fuel, if we wish to set a steam-engine in motion, and so on. If we adopt the point of view of the champions of the "neo-Kantian criticism of Marx," we must admit that in this conditional necessity there is also an element of submission. Man would be freer if he could satisfy his needs without exertion. He submits himself to nature even when he compels nature to serve his purposes. But this submission is the condition of his enfranchisement. By submitting to nature, he increases his power over nature, this meaning that he enlarges his freedoms. It would be just the same in social life, if social production were organised in a reasonable way. By submitting to the exigencies of technical and economic necessity, men would put a term to the extant preposterous regime in which they are dominated by the products of their own activities; that is to say, they would greatly enlarge their freedoms. Here, too, their submission would become a means of enfranchisement.

Nor is this all. Being accustomed to consider that between thought and being there is a great gulf fixed, the critics of Marx recognise only one shade of necessity. To borrow again from Aristotle's phrasing of the matter, they regard necessity exclusively as a force which prevents us from acting in accordance with our wishes and compels us to do that which is contrary to them. A necessity of this kind, certainly, is in direct conflict with liberty and cannot but weigh on us more

or less heavily. But here, no less, we must not forget that a force which presents itself to man as an external coercion opposing his wishes, may, in other circumstances, present itself to him in an utterly different light. Let us take, for instance, the agrarian question as it manifests itself to-day in Russia. To an intelligent landed proprietor, to a "cadet"* the forcible expropriation of the land might appear a more or less distressing historical necessity—more or less distressing according to the amount of "equitable compensation" allotted to the landowner. But in the eyes of the peasant, who has been yearning for the expropriation of the great landlords, what would appear as a more or less distressing necessity would, on the other hand, be this "equitable compensation"; and the compulsory expropriation would appear to him to be the expression of his free will and the most valuable pledge of his liberty.

Here we are touching upon what is perhaps the most important feature of the doctrine of liberty, a feature which was not discussed by Engels—obviously because its bearings were self-evident, without further explanation, to any one familiar with Hegelian philosophy.

In his *Philosophy of Religion*, Hegel said: "Freedom consists in not willing anything but oneself."†³⁶ This remark throws a strong light upon the whole question of freedom, in so far as it has to do with social psychology. The peasant who wants his share of the great landlord's land is willing "nothing but himself." But what the landlord who agrees to yield up this land is willing, is no longer "himself," but that which history compels him to will. The former is free; the latter is wise enough to submit to necessity.

* Constitutional democrat.

† Hegel, *Works*, Vol. XII, p. 98.

It would be the same for the proletarians who should be able to ensure that the means of production should become social property, and who should organise social production upon new foundations; they would be only willing themselves, and they would feel perfectly free. The capitalists, on the other hand, should this take place, would (in the best possible event) be in the position of the landlord who had accepted the agrarian programme of the constitutional democrats; they would certainly declare that freedom is one thing and historical necessity another.

I believe that those who have criticised Engels have failed to understand him; and I believe one of the reasons of this failure of understanding to be that these critics, whilst they were able to imagine themselves in the position of a capitalist, were quite unable to think themselves into the skin of a proletarian. Furthermore, I am of opinion that their inability to perform the latter feat of imagination has a specific social cause—in fact, an economic cause.

XVI.

Bourgeois ideologists, influenced by the contemporary trend towards dualism, have another charge to bring against historical materialism. Through the mouth of Stammler, they declare that the champions of the materialist conception of history disregard social teleology. This second criticism, which is closely connected with the first, is equally devoid of foundation.

Marx wrote: "In order to produce, men enter into specific mutual relations." According to Stammler, this formula shows that Marx himself, his theory notwithstanding, has not been able to escape from teleological outlooks. Marx's words, says Stammler, imply that men consciously enter into the mutual relations

without which production is impossible. It follows, he says, that these relations are the outcome of actions undertaken to attain a foreseen end.*

I shall not have much difficulty in showing where, in this chain of argument, Stammer commits a logical fallacy which invalidates all his subsequent criticisms.

Let us take an example. Certain savages, members of a hunting tribe, are in pursuit of a quarry, an elephant let us suppose. For the purposes of the chase they join forces and dispose of these forces in a particular way. Now, what is the aim, and what are the means for the attainment thereof? The aim, obviously, is to capture or kill the elephant; and the means are, to join forces in order to hunt it. By what is the aim suggested? By the necessities of the human organism. By what are the means determined? By the conditions of the hunt. Do the necessities of the human organism depend upon man, upon the human will? No, they do not; and besides, that question is a concern of physiology and not of sociology. What, in this connection, can we ask of sociology? We can ask it to explain why men who are seeking to satisfy their needs (in this case, the need for food) enter, sometimes into these relations, and sometimes into those. Well, sociology (with Marx as spokesman) explains this with reference to the condition of the forces of production. But does the condition of these forces depend upon the will of human beings and upon the ends after which they strive? Sociology, still speaking through the mouth of Marx, answers that there is no such dependence. If there is no such dependence, this signifies that the forces of production are the outcome of a necessity determined by extant conditions external to man.

What is the upshot of the foregoing considerations?

* *Wirtschaft und Recht*, second edition, p. 421.

It is that, whilst the chase is an activity conformable to the end towards which the savage is striving, this indisputable fact does nothing to invalidate Marx's contention that the relations of production which come into existence among savages devoting themselves to the chase, are established in virtue of conditions quite independent of the activity directed towards a known end. In other words, although the primitive hunter has a conscious wish to kill as much game as possible, this does not imply that the communism characteristic of the life of the members of a hunting tribe has come into existence as a product conformable to the aim of their activities. No, this communism has come into existence, or, to speak more accurately, has maintained itself (seeing that it has already existed for a long time), as the unconscious, that is to say necessary, outcome of an organisation of labour whose character is totally independent of the will of men.* That is what Stammler, the Kantian, has failed to understand. It is there that he has strayed from the path and has been followed by Struve, Bulgakov and other "temporary" Marxists, whose name is legion.†

Continuing his critical observations, Stammler says that if social evolution were to take place solely as the outcome of causal necessity, any conscious endeavour to collaborate in this evolution would be an obvious absurdity. According to him we must choose between two alternatives.

Either I regard a particular phenomenon as necessary, that is to say inevitable, and then I have no

* "Necessity, in contradistinction to liberty, is nothing other than the unconscious." (Schelling, *System des transzendentalen Idealismus*, (1880), p. 524.)

† I have discussed this question in considerable detail in various parts of my book *Historical Monism, Works*, Vol. VII.

occasion to collaborate in its occurrence; or else my collaboration is necessary for the occurrence of the phenomenon, and if so we cannot term it necessary independently of my collaboration. Who tries to collaborate in the rising of the sun, which is necessary, that is to say inevitable?*

Here we see a striking manifestation of the dualism characteristic of persons trained in the Kantian philosophy. For them, thought is always detached from being.

The rising of the sun is in no way connected, either as cause or as effect, with the social relations of men. That is why we can contrapose it, as a natural phenomenon, to the conscious aspirations of men, which have no causal tie with it. But matters are very different when we turn to consider the social phenomena of history. We know already that history is made by men. Consequently, human aspirations cannot but be among the factors of the historical movement. But history is made by men in one specific way and not in another, this depending upon a necessity of which we have already spoken at sufficient length. That necessity being given, the aspirations of men, aspirations which form an inevitable factor of social evolution, are also given as consequences. These aspirations do not exclude necessity, but are themselves determined thereby. Consequently, it is a profound logical error to contrapose them to this same necessity.

When a class longing for emancipation brings about a social revolution, it acts in a way which is more or less appropriate to the desired end; and, in any case, its activity is the cause of that revolution. But this acti-

* *Ibid.*, p. 421 et seq.—See also Stammler's article *Materiellistische Geschichtsauffassung* in *Handwörterbuch der Staatswissenschaften*, Vol. V, pp. 735-737.

vity, together with all the aspirations which have brought it about, is itself the effect of economic evolution, and therefore, is itself determined by necessity.

Sociology only becomes a science in proportion to the degree to which sociologists are able to understand the appearance of specific aims in social man (social "teleology") as a necessary consequence of the social process, determined in the last analysis by the march of economic evolution. It is an extremely characteristic fact that the consistent opponents of the materialist interpretation of history feel it incumbent upon them to prove that sociology cannot exist as a science. That means that their "criticism" becomes an obstacle to the scientific progress of our era. Those who are in search of a scientific explanation of the history of philosophical theories would find it interesting to study the way in which this role of "criticism" is connected with the class struggle in modern society.

If I am inclined to take part in a movement whose triumph seems to me a historical necessity, this only means that I consider my own activity likewise to be an indispensable link in the chain of conditions whose aggregate will necessarily ensure the triumph of the movement which is dear to me. It means neither more nor less than that. A dualist will not be able to understand; but my meaning will be perfectly clear for any one who has assimilated the theory of the unity of subject and object, and has understood how this unity manifests itself in social phenomena.

It is very important to note that the theoreticians of Protestantism in North America are quite unable to understand that there is any opposition between liberty and necessity, any opposition of the kind which has so much exercised and continues to exercise the minds of many of the ideologists of the European bourgeoisie.

A. Bary writes that "in America the most convinced among the professors of energy [professeurs d'énergie] have little inclination to recognise the freedom of the will."* This is excellently said, and closely resembles Hegel's "willing nothing but oneself." Well now, when a man "wills nothing but himself," he is not a fatalist but is exclusively a man of action.

Kantianism is not a fighting philosophy, it is not the philosophy of men of action. It is a philosophy of persons who, when all is said and done, stop half way; it is a philosophy of compromise.

Engels says it is essential that the means for putting an end to the ills of society shall be discovered in the extant material conditions of production and shall not be invented by this or that social reformer. Stammeler agrees with Engels as to this, but he accuses Engels of a lack of clarity, saying that the essence of the question is that we should ascertain "with the aid of what method the discovery ought to be made." This objection only shows that confusion reigns in Stammeler's own mind. The objection collapses spontaneously, in view of the simple fact that, even though the character of the method is in such cases determined by a great variety of factors, all these factors can in the long run be referred to their original determinants, namely the march of economic evolution.

* A. Bary, *La religion dans la société aux Etats-Unis*, Paris, 1902, pp. 88-89. He explains this by saying that such men, in that they are men of action, prefer "fatalist decisions." Bary is mistaken. Fatalism has nothing to do with the matter. This is shown by his own remarks concerning the moralist Jonathan Edwards: "Edward's viewpoint . . . is that of every man of action. For every one who has ever acted in order to reach a foreseen end, liberty means the faculty of devoting all his energies towards the attainment of this end." *Ibid.*, pp. 97-98.

The very fact that Marxian theory could come into being was determined by the evolution of the capitalist method of production; whereas the predominance of utopism in the socialism of pre-Marxian days is perfectly comprehensible in the case of a society suffering, not only from the development of the aforesaid method of production, but also (and more grievously) from the inadequacy of this development.

I need not dilate upon the topic. But perhaps, before I close the discussion, the reader will not mind my drawing his attention to the intimate ties between the tactical method of Marx and Engels and the fundamental theses of their historical theory.

We already know that, in accordance with this theory, mankind never sets itself any tasks which it is not able to perform, "for . . . the demand for the new enterprise only arises when the material conditions of existence are ripe for its successful performance or at any rate have begun to ripen." But where the conditions already exist, we have an utterly different situation from that in which they have only "begun to ripen." In the former case, the moment for a sudden change has already come; in the latter case, the sudden change remains the affair of a more or less distant future, is a "final aim" the approach to which is prepared by a whole series of gradual changes in the mutual relations of social classes. What ought to be the role of innovators during the period when the "jump" is still impossible? Obviously they can do no more than contribute to the gradual changes, in other words strive on behalf of reforms. Thus the final aim and also reforms have their several places; a contraposition of reforms to a final aim becomes unmeaning and should be relegated to the domain of utopian legends. Those who insist upon such a contraposition, whether they be

German revisionists of the type of Eduard Bernstein, or be like the Italian revolutionary syndicalists at the recent congress in Ferrara, show themselves equally incapable of understanding the spirit and the method of modern scientific socialism. It is useful to insist on this at a time when reformists and syndicalists dare to speak in the name of Marx.

How robust is the optimism of the words: "Mankind never sets itself any tasks which it is not able to perform." Obviously these words do not mean that every solution of the great problems of humanity, every scheme brought forward by a chance utopist, should be regarded as good. A utopist is one thing, and mankind is another. To put the matter more accurately, a utopist is one thing, and the social class which at a given moment represents the supreme interests of mankind is another. Marx has well said: "The more profoundly life is affected by a given historical activity, the greater will be the amplitude of the masses that will engage therein." This conveys a definite condemnation of any utopian attitude with regard to historical problems. If, nevertheless, Marx held that mankind never sets itself insoluble problems, from the theoretical point of view his words were nothing more than a new way of expressing the idea of the unity of subject and object in its application to the process of historical evolution. From the practical point of view, they are the expression of that calm and virile faith that the final aim will in due course be achieved, a faith which in former days made our never-to-be-forgotten N. G. Chernyshevsky exclaim with fervent conviction: "No matter! Our cause will triumph in the end. We shall fly the flags of victory in our street!"

SUDDEN CHANGES IN NATURE AND HISTORY

Tikhomirov writes: "Here in Russia, and not here alone, an idea is widely prevalent that we are living in a 'period of destruction' which, it is supposed, will end in a terrible revolution, with torrents of blood, dynamite explosions and so on. After that, we are given to understand, a 'period of construction' will begin. This outlook on the social movement is utterly wrong-headed and, as I have already pointed out, is nothing more than the political reflex of the outworn ideas of Cuvier and other members of the cataclysmic school of geologists. In reality, destruction and construction go hand-in-hand, being inconceivable without one another. When a phenomenon is moving towards its destruction, this can only happen, in truth, because something new is being formed in its place; and, conversely, the formation of a new order of things is nothing else than the destruction of the old order."*

The train of thought is somewhat confused, but it is possible to disintegrate from it two main theses:

1. In Russia, and elsewhere, revolutionists have no idea of evolution, of a gradual change in the type of phenomena—to borrow an expression used in another place by Tikhomirov.

2. If they had an idea of evolution, of a gradual change in phenomena, revolutionists would not imagine that we are living in a period of destruction.

Let us consider how things are in this respect "elsewhere," that is to say in the western world.

As every one knows, there actually is in progress,

* *Pourquoi j'ai cessé d'être révolutionnaire*, p. 13

in the West, a revolutionary movement on the part of the working class, which aspires to economic emancipation. What we now have to ask ourselves is, whether the theoretical spokesmen of this movement, the socialists that is to say, have been able to harmonise their revolutionary tendencies with a satisfactory theory of social evolution?

No one who has the first beginnings of a knowledge of contemporary socialism can fail to answer this question in the affirmative. Both in Europe and in America, all the socialists worth taking seriously adhere to Marx's teaching, and who does not know that this teaching is, before all, the doctrine of the evolution of human societies? Marx was an ardent defender of revolutionary activity. He had the keenest sympathy with every revolutionary movement directed against the extant social and political order. A critic may, if he pleases, refrain from sharing such "destructive" sympathies. Still, he is not entitled to believe that, because Marx had such sympathies, Marx's imagination was exclusively "fixed upon forcible revolutions," that he ignored social evolution, slow and progressive development. Not only did Marx not forget evolution but he discovered many of the most important laws of social evolution. According to the picture in his mind, the history of mankind unrolled in a harmonious fashion, not fantastically; and he was the first to conceive such a harmonious picture. He was the first to show that economic evolution leads to political revolutions. Thanks to him, the contemporary revolutionary movement has an aim that is clearly fixed and a theoretical basis that has been strictly formulated. If these things are so, how can Tikhomirov fancy himself able, by a few loosely worded phrases concerning social construction, to prove the inconsistency of the

revolutionary trends existing in Russia and elsewhere. One can only suppose that he has not taken the trouble to try and understand socialist doctrine.

Nowadays Tikhomirov is inspired with repugnance for "sudden catastrophes" and "forcible revolutions." That is his own affair; he is not the first to turn his back on revolution and will not be the last. But he is wrong in thinking that "sudden catastrophes" are impossible in nature and in human society. First of all, the "suddenness" of such catastrophes is a relative notion. What is sudden for one person is not sudden for another. For the ignorant, an eclipse of the sun occurs suddenly, but it is not a sudden occurrence for an astronomer. The same thing applies to revolutions. These "political catastrophes" occur "suddenly" for ignorant persons and for the great multitude of self-satisfied philistines, but they are not sudden for one who has been watching the course of phenomena in the social environment. Furthermore, if Tikhomirov were to turn his attention to nature and history, even while contemplating them from the point of view of the theory he now holds, he would expose himself to a number of overwhelming surprises. He has made a mental note to the effect that in nature there are no jumps and that, if we leave the world of revolutionary mirages and come to the firm ground of reality, "we can only speak, scientifically, of the slow transformation of any given type of phenomenon." None the less, nature makes jumps, without troubling herself about all these philippics against suddenness. Tikhomirov is certain that "the outworn ideas of Cuvier" are erroneous and that "brusque geological catastrophes" are nothing but a product of the imagination. Well, let us suppose that he is in the south of France, leading a sheltered existence, without any

hint of alarms or perils. Then, suddenly, there comes an earthquake, like that of two years ago. The ground shakes violently, houses tumble down, the inhabitants run out terrified; in a word, there is a genuine catastrophe, indicating incredible heedlessness on the part of mother nature. Learning from this bitter experience, Tikhomirov is compelled to reconsider his geological concepts and come to the conclusion that "the slow transformation of phenomena" (in this case, the phenomena of the earth's crust) does not exclude the possibility of changes of another order, changes which, from a certain outlook, may appear sudden and may seem to be produced violently.*

Now let us suppose that Tikhomirov puts a saucepan full of water on a stove. The water will remain water as long as its temperature is rising from 32 degrees to 212 degrees. He will have no occasion to be alarmed about any suddenness. Then will come a moment when the temperature reaches a critical point and, all of a sudden (what a terrible thing!), a catastrophe occurs; the water is changed into steam, just as if its imagination had been running on forcible revolutions.

* Because the geological doctrines of Cuvier have been exploded, it does not follow that science has proved the general impossibility of geological catastrophes or revolutions. The attempt to give such a proof would conflict with widely known phenomena; for instance, volcanic eruptions, earthquakes etc. What science has to do is to explain these phenomena as the outcome of the cumulative action of certain forces in nature whose slowly progressive influences can be watched from moment to moment. In other words, geology has to explain the "revolutions" that affect the earth's crust, as the outcome of the "evolution" undergone by this same crust. Sociology has to work along the same lines, and, doing so with Hegel and Marx as spokesmen, has achieved successes akin to those achieved by geology.

Now Tikhomirov cools the water down, and the same strange story repeats itself at the other end of the scale. By slow degrees, at first, the temperature of the water falls, while the water remains water. Now comes a moment when the cooling down reaches freezing-point and the water is changed into ice, regardless of any theory that the idea of sudden revolutions is a false one.

Tikhomirov is watching the development of one of those insects which are subject to metamorphoses. The changes in the chrysalis go on slowly and, until the time arrives for a new order of things, the chrysalis remains a chrysalis. The observer rubs his hands joyfully, saying: "Here everything is going on as it should. Neither the social organism nor the animal organism experiences any of those sudden upsets whose existence I have been forced to recognise in the inorganic world. At any rate, when devoting herself to the creation of living beings, nature has recovered her sobriety." Soon, however, his happiness is dashed. One fine day, the chrysalis undergoes a "forcible revolution," splits up the back and makes a new entry into the world as a butterfly. Thus Tikhomirov has been compelled to admit that even the organic world is not insured against "sudden changes."

It would be exactly the same if Tikhomirov were to direct his attention to his own evolution. Beyond doubt, he would discover there a similar sharp turn, a like revolutionary change. He would have to remember some particular drop which filled the cup of his impressions to the brim and made it run over, so that he was transformed from a more or less hesitating defender of the revolution into its more or less sincere opponent.

Tikhomirov and I will set to work at addition. We will take the number five, and, being thoroughly

respectable persons, we will add to it one by one "gradually," making six, seven, eight. Up to nine, everything goes well. But when, after this, we want to add another unit, a disaster occurs. Suddenly, without any plausible reason, our units get changed into a ten. The like misfortune befalls us when we pass from tens to a hundred.

Tikhomirov and I will not be able to enjoy music, for here there are too many sudden transitions of all kinds which will put our "conceptions" to flight.

To all Tikhomirov's confused arguments concerning "forcible revolution," contemporary revolutionists can answer by asking this simple question: "What are you going to do about those sudden upsets which have already occurred in real life and which, in any case, represent periods of destruction? Are we to declare them null and void; or are we to regard them as the work of frivolous and futile people whose actions are not worth the attention of a serious-minded sociologist?" Whatever we may decide to do about such phenomena, it must certainly be admitted that history records many violent revolutions and political catastrophes. Why, then, should Tikhomirov imagine that any one who thinks that similar phenomena may occur in the future is cherishing "erroneous social conceptions"?

History makes no jumps! This is perfectly true. On the other hand, it is equally true that history has made a number of jumps, has witnessed a number of violent revolutions. Instances could be quoted in abundance. What is the meaning of this contradiction? Only that the former of the two theses has not been correctly phrased, and that is why it is so often misunderstood. What ought to have been said was that history never makes jumps unless the way has

been prepared for them. There can be no sudden change without a sufficient cause, and this cause is to be found in the previous march of social evolution. But, inasmuch as this evolution never ceases in societies that are in course of development, we may say that history is continually engaged in preparing for such sudden changes and revolutions. It goes on doing this assiduously and imperturbably; it works slowly; but the results of its efforts, these sudden changes, these political catastrophes, are absolutely inevitable.

The transformation of type undergone by the French bourgeoisie was a slow process. The bourgeois of the time of the Regency differed in many respects from the bourgeois of the days of Louis XI., but, speaking generally, the one and the other belonged to the same type, that of the burgher of the old regime. As the centuries passed, he had grown richer, better educated, had developed more extensive needs, but he had not ceased to be the plebeian who had always and everywhere to give ground before the noble. Then came the year 1789, when the bourgeois raised his head proudly. A few years more, and he had become the king of the castle. How has this change been effected? "With torrents of blood," to the rolling of the drums, accompanied by "explosions of gunpowder"—though not by explosions of dynamite, since high explosives had not yet been invented. The bourgeois forced France to undergo a "period of destruction," recking not of the fact that in days to come there would be a pedant to proclaim that forcible revolutions are a "false conception."

Very slowly there was a change of type in Russian social conditions. The petty principedoms, whose internecine quarrels had dismembered the country, disappeared; the boyars submitted to the authority of the

tsar and became simple nobles, compelled, like all their class, to devote themselves to the service of the crown. Muscovy subjugated the Tartar khanates, annexed Siberia and the border countries of the south, but still remained the capital of an Asiatic realm. Then Peter the Great appeared, and effected a violent revolution in the life of the country. A new period of Russian history, the European period, began. The slavophiles reviled Peter as "antichrist," precisely because he effected a sudden revolution. They declared that, in his eagerness for change, he had forgotten the need for gradual evolution, for a slow transformation of the social system. But every one competent to think must surely be able to understand that the sudden overturning of the extant order effected by Peter the Great was a change imposed by the historical evolution of Russia, which had paved the way for the revolutionary transformation.

Quantitative changes, accumulating by slow degrees, become in the end qualitative changes. These transitions occur by jumps and cannot occur in any other way.

"Gradualists" of one kind or another, those who make a dogma of moderation and of meticulous order, cannot understand this phenomenon, although it was long ago brought into relief by German philosophy. Here, as on many other occasions, we shall do well to quote Hegel, who certainly cannot be charged with a passion for "revolutionary activity." He wrote. "The ordinary notion of the appearance or disappearance of anything, is the notion of a gradual appearance and disappearance. Nevertheless, there are transformations of being which are not only changes from one quantity to another, but also changes from the quantitative to the qualitative; such a transformation is an interrup-

tion of 'gradual becoming' and gives rise to a kind of being qualitatively different from the preceding. Every time that there is an interruption of 'gradual becoming,' there occurs a jump in the course of evolution, after which the place of one phenomenon has been occupied by another. Underlying the theory of gradualness is the idea that that which makes its appearance already exists effectively, and only remains imperceptible because it is so very small. In like manner, when we speak of the gradual disappearance of a phenomenon, we represent to ourselves that this disappearance is an accomplished fact and that the phenomenon which takes the place of the extant one already exists, but that neither the one nor the other is as yet perceptible. . . . In this way, however, we are really suppressing all appearance and all disappearance . . . To explain the appearance or the disappearance of a given phenomenon by the gradualness of the transformation is absurdly tautological, for it implies that we consider as having already appeared or disappeared that which is actually in course of appearing or disappearing."*

This is equivalent to saying that if you had to explain the origin of the State, you would simply imagine a microscopic organisation of the State which, gradually becoming larger, would at length make people aware of its existence. In the same way, if you had to explain the disappearance of primitive clan relations, you would suppose their becoming by degrees more and more minute until they ceased to be visible, and then the trick would be done. I need hardly say that by such ways of thinking we shall not get far in the sciences. One of Hegel's greatest merits was that he purged the doctrine of evolution of these absurdities. But what does Tikhomirov care about Hegel and his

* *Wissenschaft der Logik*, Vol. I, pp. 313-314, in the Nuremberg edition of 1812.

merits? Tikhomirov has told us, once for all, that the theories of the western world are not applicable to Russia.

Notwithstanding his views regarding forcible revolutions and political catastrophes, we can rest assured that, at the present moment, history is preparing, in the most advanced countries, a revolutionary change of altogether exceptional importance, and one which, we may presume, will be achieved by force. This change will affect the way in which products are distributed. Economic evolution has brought into being titanic forces of production; and, if these forces are to be kept at work, there must be a particular kind of organisation of production. The forces in question can only be applied in large-scale industrial establishments where work is carried on collectively; they necessitate social production.

The individual appropriation of products, deriving from the utterly different economic conditions of a period when petty industry and petty agriculture were dominant, is in flagrant conflict with this social method of production. Thanks to the extant methods of appropriation, the products of the social labour of the workers become the private property of the entrepreneurs. This primary economic contradiction is the cause of all the other social and political contradictions in contemporary society. It is a contradiction which becomes ever more flagrant. The entrepreneurs cannot dispense with the social organisation of production, for this is the source of their wealth. Nay, competition forces them to extend the social organisation of production to branches of industry where it does not yet exist. The great industrial enterprises crowd out the petty producers, and in this way bring about an increase in the number of the working class and intensify its power.

The fatal dénouement is at hand. In order to do away with the contradiction between the extant method of production and the extant method of distribution, a contradiction harmful to the workers, these must seize political power, which is at present in the hands of the bourgeoisie. If you like to phrase it thus, you may say that the workers must bring about a "political catastrophe." Economic evolution is necessarily leading to a political revolution; and this latter, in its turn, will be the cause of important changes in the economic structure of society. It is by slow degrees that the method of production assumes a social character; but the appropriate change in the method of distribution will be the outcome of a forcible revolution.

That is how the historical movement is proceeding, not here in Russia, but in the West. Tikhomirov, although he is so much concerned to "watch the powerful civilisation of France," has absolutely no "conception" of the social life of the West.

Forcible revolutions, "torrents of blood," scaffolds and executions, gunpowder and dynamite—these are distressing phenomena. What are you going to do about them, since they are inevitable? Force has always been the midwife of an old society pregnant with a new one. That is what Marx said, and he is not the only one to have such thoughts. F. C. Schlosser, the historian, was convinced that only "by fire and sword" are great revolutions in the destiny of mankind accomplished.* Why is there this distressing

* His profound knowledge of history actually inclined Schlosser to accept the "outworn geological conceptions" of Cuvier. In his *Geschichte des achtzehnten Jahrhunderts*, he writes regarding Turgot's plans for reform—plans which still arouse the admiration of philistines: "These plans embraced in their scope all the main advantages subsequently gained by France through the revolution. The advantages could only be secured by a revolution, for the

necessity? Whose fault is it? Can it be that truth is not yet all-powerful in this world of ours?

Not yet! The reason is to be found in the difference between the interests of the different classes of society. For one of these classes, it is advantageous, and even indispensable, that social relations shall be remodelled. For the other class, it is advantageous, and even indispensable, to oppose any such remodelling. To the members of one class, the proposed remodelling promises happiness and freedom; to the members of the other class it will bring the abolition of their privileged position and even their total suppression as a privileged class. What class is there which does not fight to maintain its own existence? What class is there which has no instinct of self-preservation? The social regime profitable to any given class, seems to the members of that class, not merely just, but the only possible one. The members of this class consider that any attempt to change the extant order is an attempt to destroy the foundations of human society. They think that they are called upon to defend these foundations, even by force. Hence "torrents of blood," hence the clash of arms.

Besides, the socialists, when meditating on the approaching social revolution, can console themselves with the idea that the more widely their "subversive"

Turgot ministry showed itself a prey to illusion. Despite experience and history, it expected that, simply by issuing ordinances, it would be able to transform a social organisation which had come into being in the course of time and was maintained by solid ties. Radical reforms, whether in nature or in history, are only possible when all the extant has been annihilated by fire, sword and destruction." (Cf. the French translation, *Histoire du XVIII^{me} siècle*, second edition, St. Petersburg, 1868, Vol. III, p. 361.) Tikhomirov will assure us that this German scientist must have had a bee in his bonnet!

doctrines are diffused, the more the working class has been developed and organised and disciplined—the fewer will be the victims in the inevitable “catastrophe.”

Nevertheless, the triumph of the proletariat, by putting an end to the exploitation of man by man, and thus to the division of society into a class of exploiters and a class of exploited, will make civil wars, not only useless, but impossible. Thenceforward, mankind will advance by the sole “power of truth,” and will no longer have occasion for the argument of the mailed fist.

DIALECTIC AND LOGIC

The philosophy of Marx and Engels is not only a materialist philosophy, it is dialectical materialism. Two objections are, however, raised against this doctrine. We are told, first of all, that dialectic itself is not proof against criticism; and, secondly, that materialism is incompatible with dialectic. Let us examine these objections.

The reader will probably remember how Bernstein explained what he termed the "errors" of Marx and Engels. They were due, he said, to the disastrous influence of dialectic. Customary logic holds fast to the formula: "Yes is yes, and no is no"; whereas dialectic has a formula of a diametrically opposite kind: "Yes is no, and no is yes." Detesting this latter formula, Bernstein declares that it leads us into temptation and involves us in the most dangerous errors. Probably most readers who pass by the name of "educated" will agree with Bernstein, seeing that, on the face of it, the formula "Yes is no, and no is yes" is in flagrant contradiction with the fundamental and immutable laws of thought. That is the aspect of the question we have now to examine.

The fundamental laws of logic are three in number: (1) The law of identity; (2) the law of contradiction; (3) the law of the excluded middle.

The law of identity (*principium identitatis*) declares: A is A (*omne subjectum est praedicatum sui*), or $A=A$.

The law of contradiction, A is not not-A, is nothing more than the negative form of the first law.

According to the law of the excluded middle (*principium exclusi tertii*), two contradictory propositions, mutually exclusive, cannot both of them be true. In fact, either A is B, or else A is not B. If one of these propositions is true, the other is necessarily false; and conversely. There is not, and cannot be, any middle course here.

Ueberweg points out that the law of contradiction and the law of the excluded middle can be unified in the following logical rule: To every definite question, understood in a definite sense, as to whether a given characteristic attaches to a given object, we must reply either yes or no; we cannot answer yes and no.*

It is certainly hard to raise any objection to this. But if the statement is true, that implies that the formula "Yes is no, and no is yes" must be erroneous. Nothing will be left for us, then, but to laugh, like Bernstein, and to raise our hands to heaven, when we see that thinkers as profound as Heraclitus, Hegel, and Marx have found it more satisfying than the formula "Yes is yes, and no is no," a formula solidly based upon the three fundamental laws of thought stated above.

This conclusion, fatal to dialectic, seems irrefutable. But, before we accept it, let us examine the matter more closely.

The movement of matter underlies all the phenomena of nature. But what is movement? It is an obvious contradiction. Should any one ask you whether a body in motion is at a particular spot at a particular time, you will be unable, with the best will in the world, to answer in accordance with Ueberweg's rule, that is to say in accordance with the formula, "Yes is yes, and no is no." A body in motion is at a given point, and at the same time it is not there.

* *System der Logik*, Bonn, 1874, p. 12.

We can only consider it in accordance with the formula "Yes is no, and no is yes." This moving body thus presents itself as an irrefutable argument in favour of the "logic of contradiction"; and one who is unwilling to accept this logic will be forced to proclaim, with Zeno, that motion is merely an illusion of the senses.

But of all those who do not deny motion, we shall ask: "What are we to think of this fundamental law of thought which conflicts with the fundamental fact of being? Must we not treat it with some circumspection?"

We seem to be between the horns of a dilemma. Either we must accept the fundamental laws of formal logic and deny motion; or else we must admit motion and deny these laws. The dilemma is certainly a disagreeable one. Let us see if there is no way of escaping it.

The movement of matter underlies all the phenomena of nature. But motion is a contradiction. We must consider the question dialectically, that is to say, as Bernstein would phrase it, in accordance with the formula "Yes is no, and no is yes." Hence, we are compelled to admit that as concerns this basis of all phenomena we are in the domain of the "logic of contradiction." But the molecules of matter in motion, becoming conjoined one with another, form certain combinations; things, objects. Such combinations are distinguished by more or less marked solidity; they exist for a longer or shorter time, and then disappear, to be replaced by others. The only thing which is eternal is the movement of matter, matter itself, indestructible substance. But as soon as a particular temporary combination of matter has come into existence as a result of the eternal movement of matter, and as long as it has not yet disappeared owing to this same movement,

the question of its existence must necessarily be solved in a positive sense. That is why, if any one points out to us the planet of Venus and asks us "Does this planet exist?" we shall answer, unhesitatingly, "Yes." But if any one asks us whether witches exist, we shall answer, no less unhesitatingly, "No." What does this mean? It means that when we are concerned with distinct objects we must, in our judgments about them, follow the above-mentioned rule of Ueberweg; and must, in general, conform to the fundamental laws of thought. In that domain there prevails the formula agreeable to Bernstein, "Yes is yes, and no is no."

Even there, however, the realm of this respectable formula is not unrestricted. When we are asked a question as to the reality of an object which already exists, we must give a positive answer. But when an object is as yet only in course of becoming, we may often have a good reason for hesitating as to our reply. When we see a man who has lost most of the hair from his cranium, we say that he is bald. But how are we to determine at what precise moment the loss of the hair of the head makes a man bald?

To every definite question as to whether an object has this characteristic or that, we must respond with a yes or a no. As to that there can be no doubt whatever. But how are we to answer when an object is undergoing a change, when it is in the act of losing a given characteristic or is only in course of acquiring it? A definite answer should, of course, be the rule in these cases likewise. But the answer will not be a definite one unless it is couched in accordance with the formula "Yes is no, and no is yes"; for it will be impossible to answer in accordance with the formula "Either yes or no," as recommended by Ueberweg.

The objection can, of course, be made that the

characteristic which the object is in course of losing has not yet ceased to exist and that the one which it is in course of acquiring already exists, so that an answer couched in accordance with the formula "Either yes, or no" is possible, indeed obligatory, even when the object with which we have to do is undergoing change. But such a contention is erroneous. A youth on whose chin down is beginning to sprout is certainly growing a beard, but we cannot for that reason speak of him as bearded. Down on the chin is not a beard, although it gradually changes into a beard. If the change is to become qualitative, it must reach a quantitative limit. One who forgets this is unable to express a definite opinion concerning the qualities of objects.

"Everything is in a flux, everything changes," said of old, the philosopher of Ephesus. The combinations which we speak of as objects are permanently in a state of more or less rapid change. In proportion as such combinations remain the same combinations, we can judge them in accordance with the formula "Yes is yes, and no is no." But in proportion as they change to a degree in which they cease to exist as formerly, we must appeal to the logic of contradiction; we must, even at the risk of offending Bernstein and the whole tribe of metaphysicians, say "Yes and no, they exist and they do not exist."

Just as inertia is a special case of movement, so thought in conformity with the rules of formal logic (in conformity with the fundamental laws of thought) is a special case of dialectical thought.

It is recorded of Cratylus, one of Plato's disciples, that he was not in agreement with Heraclitus, who had said: "We cannot go down the same river twice." Cratylus insisted that we could not do it even once, seeing that, while we were going down the river, it

was changing, was becoming another river. In the case of such judgments, the factor which constitutes the extant being is, so to say, over-ruled by the factor of becoming. But this is to misuse dialectic and not to make a proper use of it. Hegel remarks: "The 'something' is the first negation of negation."

Those of our critics who are not completely ignorant of philosophical literature are fond of referring to Trendelenburg, who is said to have refuted all the arguments in favour of dialectic. But these gentlemen, obviously, have misread Trendelenburg, if they have read him at all. They have utterly forgotten (if they ever knew, which I doubt) one little matter. Trendelenburg declared that the law of contradiction is applicable, not to motion, but only to the objects created thereby. That is sound. But motion does not merely create objects. As I have already said, it is constantly modifying them. That is why the logic of movement (the "logic of contradiction") never forfeits its rights over the objects created by motion. That is why, moreover, even while we pay to the fundamental laws of formal logic the homage which is their due, we must remember that these laws are only valid within certain limits, within limits which leave us free to pay homage also to dialectic. It is thus that the law was really formulated by Trendelenburg, although he himself did not draw all the conclusions derivable from the principle he formulated—a principle of outstanding importance to the theory of cognition.

Let me add, in passing, that Trendelenburg's *Logische Untersuchungen* contain a number of sound observations which do not tell against my view but in favour of it. This may seem strange, but can be explained very simply by the simple fact that Trendelenburg was really attacking idealist dialectic. Thus he

saw the defeat of dialectic in so far as it affirms a movement inherent in and proper to the pure idea, a movement which is an autocreations of being. Certainly such affirmation involves a profound error. But who does not know that the fallacy attaches exclusively to idealist dialectic? Who does not know that when Marx set to work in order to put dialectic "on its feet," whereas it had been standing on its head, he began by correcting this primary error, which was the outcome of the old idealist foundation? Here is another instance. Trendelenburg says that as an actual fact, in Hegel's system, motion is the foundation of logic (which, it seems, does not require any premises upon which to base itself). This statement is also correct, but is once more an argument in favour of materialist dialectic. Now for a third example, the most interesting one of them all. Trendelenburg tells us it is wrong to imagine that, according to Hegel, nature is nothing more than applied logic. On the contrary, the logic of Hegel is nowise a creation of the pure idea; it is the outcome of an anticipatory abstraction from nature: In Hegel's dialectic, almost everything has been derived from experience; and if experience were to deprive dialectic of all that experience has lent, dialectic would be poor indeed. Perfectly true! But this is exactly what was said by those disciples of Hegel who rose in revolt against their master's idealism and went over to the materialist camp.

I could give plenty more examples, but they would take me away from my subject. All I wanted was to show our critics that, in their campaign against us, they would do well to avoid calling in the aid of Trendelenburg.

To continue: I have said that motion is a contradiction in action; and that, consequently, the funda-

mental laws of formal logic cannot be applied to it. I must explain this proposition lest it should be misunderstood. When we have to do with the passage from one kind of movement to another (let us say, with the passage from mechanical movement to heat), we must also reason in accordance with Ueberweg's fundamental rule. We must say: "This kind of motion is either heat, or else mechanical movement, or else——" and so on. That is obvious. But if so, it signifies that the fundamenal laws of formal logic are, within certain limits, applicable also to motion. The inference, once more, is that dialectic does not suppress formal logic, but merely deprives the laws of formal logic of the absolute value which metaphysicians have ascribed to them.

If the reader has paid careful attention to what was said above, he will have no difficulty in understanding how worthless is the contention so often put forward that dialectic is incompatible with materialism. On the contrary, our dialictic is based upon the materialist conception of nature. If the materialist conception of nature were to crumble into ruins, our dialectic would crumble with it. Conversely, without dialectic, the materialist theory of cognition is incomplete, one-sided; nay more, it is impossible.

In Hegel's system, dialectic coincides with metaphysics. For us, dialectic is buttressed upon the doctrine of nature.

In Hegel's system, the demiurge [creator] of reality (to use Marx's phrase) is the absolute idea. For us, the absolute idea is only an abstraction from the motion by which all the combinations and all the states of matter are produced.

According to Hegel, thought progresses thanks to the discovery and the solution of contradictions con-

tained in concepts. According to our materialist doctrine, the contradictions contained in concepts are only the reflection, the translation into the language of thought, of contradictions which exist in phenomena owing to the contradictory nature of their common foundation, namely movement.

According to Hegel, the march of things is determined by the march of ideas; according to us, the march of ideas is explained by the march of things, the march of thought by the march of life.

Materialism sets dialectic on its feet and thus strips from it the veil of mystification in which it was wrapped by Hegel. Furthermore, in doing so, it displays the revolutionary character of dialectic.

"In its mystified form, dialectic became the fashion in Germany because it seemed to elucidate the existing state of affairs. In its rational form, it is a scandal and an abomination to the bourgeoisie and its doctrinaire spokesmen because, while supplying a positive understanding of the existing state of things, it at the same time furnishes an understanding of the negation of that state of things and enables us to recognise that that state of things will inevitably break up; it is an abomination to them because it regards every historically developed social form as in fluid movement, as transient, because it lets nothing overawe it but is in its very nature critical and revolutionary."*

It is quite in order that the bourgeoisie, essentially reactionary, should regard materialist dialectic with horror. But that persons who sincerely sympathise with the revolutionary movement should disapprove of materialist doctrine is both ridiculous and sad—it is the climax of absurdity.

* From the preface to the second German edition to the first volume of *Capital*, 1873 (new translation, 1928).

One more point has to be considered. We know already that Ueberweg was right, and we know how right he was, in demanding that those who think should think logically, and in demanding definite answers to definite questions as to whether this or that characteristic attaches to this or that object. Now, however, let us suppose that we have to do with an object which is not simple but complex and has diametrically conflicting properties. Can the judgment demanded by Ueberweg be applied to such an object? No, Ueberweg himself, just as strenuously opposed as Trendelenburg to the Hegelian dialectic, considers that in this case we must judge in accordance with another rule, known in logic under the name of "*principium coincidentiæ oppositorum*" (the principle of the coincidence of opposites). Well now, the immense majority of the phenomena with which natural science and sociological science have to do come within the category of such objects. The simplest globule of protoplasm, the life of a society in the very earliest phase of evolution—one and the other exhibit diametrically conflicting properties. Manifestly, then, we must reserve for the dialectical method a very large place in natural science and in sociology. Since investigators have begun to do this, these sciences have advanced with rapid strides.

Would the reader like to know how dialectic has secured a recognised position in biology? Let him recall the discussions regarding the nature of species that were aroused by the promulgation of the theory of evolution. Darwin and his adherents declared that the various species of one and the same family of animals or plants are only the differentiated descendants of a single primitive form. Furthermore, according to the theory of evolution, all the genera of one

order are likewise derived from a single primordial form; and the same must be said of all the orders belonging to a single class. On the other hand, according to Darwin's adversaries, all the species of animals and plants are completely independent one of another and only the individuals belonging to a single species can be said to derive from a common form. This latter conception of species had already been formulated by Linnæus, who said: "There are as many species as the Supreme Being created in the beginning of things." That is a purely metaphysical conception, for the metaphysician regards things and concepts as "distinct, unchangeable, rigid objects, given once for all, to be examined one after another, each independently of the others." (Engels.) The dialectician, on the contrary, Engels tells us, regards things and concepts "in their connection, their interlacement, their movement, their appearance and disappearance." This conception has made its way into biology with the spread of the Darwinian theory, and has come to stay, whatever rectifications may be made in the theory of evolution as science advances.

To underline the importance of dialectic for sociology, it will suffice to recall how socialism has developed from utopism to science.

The utopian socialists regarded "human nature" from an abstract point of view and appraised social phenomena in accordance with the formula "Yes is yes, and no is no." Property either was or was not conformable to human nature; the monogamic family was or was not conformable to human nature; and so on. Regarding human nature as unchangeable, utopian socialists were justified in hoping that, among all possible systems of social organisation, there must be one which was more conformable than any other to

that nature. Hence their wish to discover this best of all possible systems, the one most conformable to human nature. Every founder of a school believed that he had discovered it, and that is why he advocated the adoption of his particular utopia. Marx introduced the dialectical method into socialism, thus making of socialism a science and giving the death-blow to utopism. Marx does not appeal to human nature; he does not know of any social institutions which either do or do not conform to human nature. Already in his *Misère de la philosophie*, we find this significant and characteristic criticism of Proudhon: "Monsieur Proudhon is unaware that history in its entirety is nothing other than a continuous modification of human nature."*

In *Capital*, Marx says that man, by acting on nature outside himself and changing it, changes his own nature. This is a dialectical standpoint from which a new outlook on the problems of social life can be secured. Take, for instance, the question of private property. The utopists had written at great length, arguing with one another and with the economists, as to whether private property ought to exist, that is to say, as to whether private property was conformable to human nature. Marx put the question upon a concrete platform. According to his doctrine, the forms and relations of property are determined by the evolution of the forces of production. To one phase of evolution there corresponds a specific form of property; to another phase, another form: but there is no absolute solution, and cannot be one, for everything is in a flux, everything changes. "Wisdom becomes folly; pleasure, pain."

Hegel says: "Contradiction leads forward." In the class struggle, science finds a striking confirmation of

* *Misère de la philosophie*, Paris, 1896, p. 204.

this dialectical conception. Unless we take the class struggle into account, it is impossible to understand the evolution of social and mental life in a society divided into classes.

But this "logic of contradiction," which, as we have seen, is the reflection in the human brain of the eternal process of movement—why should it be called dialectic? I will not undertake a lengthy consideration of the question, and for answer I shall be content to quote Kuno Fischer :

"Human life resembles a dialogue in this sense that, with age and experience, our views concerning persons and things undergo a gradual change, like the opinions of the interlocutors in the course of a lively and fruitful conversation. This involuntary and necessary change in our outlooks on life and the world is the very tissue of experience. . . . That is why Hegel, when comparing the evolution of consciousness with that of a philosophical conversation, has given it the name of dialectic, or the dialectic movement. Plato, Aristotle, Kant, each of them employed this term in an important sense peculiar to himself; but in no philosophical system has it been given so comprehensive a meaning as in that of Hegel."

REFERENCE NOTES

¹ In an article written on the day of Engels' funeral, my friend Victor Adler says, with good reason, that socialism, as Marx and Engels understood it, is not merely an economic doctrine but also a universal doctrine. (I am quoting from the Italian edition, F. Engels, *Economia politica*, with introduction and biographical and bibliographical notes by Filippo Turati, Victor Adler and Karl Kautsky, Milan, 1895). Although this characterisation of socialism as understood by Marx and Engels is perfectly true, it seems strange that Victor Adler should conceive it possible to replace the materialist foundation of this "universal doctrine" by a Kantian foundation. What are we to think of a universal doctrine whose philosophical foundation has no connection with the superstructure that is built thereon? Engels writes: "Marx and I stood almost alone in having wittingly introduced dialectic into the materialist interpretation of nature and history." (See the preface to the third edition of *Anti-Dühring*.) Thus the fathers of scientific socialism, despite the assertions of some of their pupils, were conscious materialists, not only in the field of history, but also in the fields of the natural and physical sciences.

² In an article on Dietzgen ("Sovremionny Mir," 1907, No. 7—reproduced in the collection entitled *From Defence to Attack, Works*, Vol. XVII). Plekhanov shows that "the writings of this exceptionally gifted working man do not, as far as theory is concerned, contain anything which can be considered new as compared with the contents of the writings of Marx, Engels, and Feuerbach."

Plekhanov is mistaken in saying that, up to now, there has been no attempt at "supplementing Marx" by Thomas Aquinas. In a series of extremely interesting sketches on the theories of Marx (whom he regards as the greatest economist that ever lived), Wilhelm Hohoff, the well-known German Catholic writer, endeavours to prove that, in his theory of value, Marx agrees in many respects with the great medieval theologian. See *Die Bedeutung der Marxschen Kapitalkritik und Warenwert und Kapital*.

profit. In France there are to be found among Catholic socialists some who admire both Marx and Thomas Aquinas. (D. Ryazanov.)

³ In this preface, Engels shows that materialism is of British birth, that Bacon was really the parent of English materialism and that, together with Hobbes and Locke, he was the progenitor of the French materialist school, whereas contemporary English agnosticism is nothing more than shamefaced materialism.

"What, indeed, is agnosticism but, to use an expressive Lancashire term, 'shamefaced' materialism? The agnostic's conception of nature is materialist throughout. The entire natural world is governed by law and absolutely excludes the intervention of action from without. But, he adds, we have no means either of ascertaining or of disproving the existence of some Supreme Being beyond the known universe. Now, this might hold good at the time when Laplace, to Napoleon's question, why in the great astronomer's *Mécanique céleste* the Creator was not even mentioned, proudly replied: 'Je n'avais pas besoin de cette hypothèse.' ['I had no need of that hypothesis.] But nowadays, in our evolutionary conception of the universe, there is absolutely no room for either a Creator or a Ruler; and to talk of a Supreme Being shut out from the whole existing world, implies a contradiction in terms and, as it seems to me, a gratuitous insult to the feelings of religious people.

"Again, our agnostic admits that all our knowledge is based upon the information imparted to us by our senses. But, he adds, how do we know that our senses give us correct representations of the objects we perceive through them? And he proceeds to inform us that, whenever he speaks of objects or their qualities, he does in reality not mean these objects and qualities, of which he cannot know anything for certain, but merely the impressions which they have produced on his senses. Now, this line of reasoning seems undoubtedly hard to beat by mere argumentation. But before there was argumentation there was action. 'Im Anfang war die That.' [In the beginning was the deed.] And human action had solved the difficulty long before human ingenuity invented it. The proof of the pudding is in the eating. From the moment we turn to our own use these objects, according to the qualities

we perceive in them, we put to an infallible test the correctness or otherwise of our sense-perceptions. If these perceptions have been wrong, then our estimate of the use to which an object can be turned must also be wrong and our attempt must fail. But if we succeed in accomplishing our aim, if we find that the object does agree with our idea of it and does answer the purpose we intended it for, then that is positive proof that our perceptions of it and of its qualities, so far, agree with reality outside ourselves. And whenever we find ourselves face to face with a failure, then we generally are not long in making out the cause that made us fail; we find that the perception upon which we acted was either incomplete and superficial or combined with the results of other perceptions in a way not warranted by them—what we call defective reasoning. So long as we take care to train and to use our senses properly and to keep our action within the limits prescribed by perceptions properly made and properly used, so long we shall find that the result of our action proves the conformity of our perceptions with the objective nature of the things perceived. Not in one single instance, so far, have we been led to the conclusion that our sense-perceptions, scientifically controlled, induce in our minds ideas respecting the outer world that are, by their very nature, at variance with reality, or that there is an inherent incompatibility between the outer world and our sense-perceptions of it.

“But then come the Neo-Kantian agnostics and say: We may correctly perceive the qualities of a thing, but we cannot by any sensible or mental process grasp the thing-in-itself. This ‘thing-in-itself’ is beyond our ken. To this Hegel, long since, has replied: If you know all the qualities of a thing, you know the thing itself; nothing remains but the fact that the said thing exists without us; and when your senses have taught you that fact, you have grasped the last remnant of the thing-in-itself, Kant’s celebrated unknowable ‘Ding an sich.’ To which it may be added, that in Kant’s time our knowledge of natural objects was indeed so fragmentary that he might well suspect, behind the little we know about each of them, a mysterious ‘thing-in-itself.’ But one after another these ungraspable things have been grasped, analysed and, what is more, reproduced by the giant progress of science; and

what we can produce we certainly cannot consider as unknowable. To the chemistry of the first half of this century organic substances were such mysterious objects; now we learn to build them up one after another from their chemical elements without the aid of organic processes. Modern chemists declare that as soon as the chemical constitution of no matter what body is known, it can be built up from its elements. We are still far from knowing the constitution of the highest organic substances, the albuminous bodies; but there is no reason why we should not, if only after centuries, arrive at that knowledge and, armed with it, produce artificial albumen. But if we arrive at that, we shall at the same time have produced organic life, for life, from its lowest to its highest forms, is but the normal mode of existence of albuminous bodies.

"As soon, however, as our agnostic has made these formal mental reservations, he talks and acts as the rank materialist he at the bottom is. He may say that, as far as we know, matter and motion, or as it is now called, energy, can neither be created nor destroyed, but that we have no proof of their not having been created at some time or other. But if you try to use this admission against him in any particular case, he will quickly put you out of court. If he admits the possibility of spiritualism in the abstract, he will have none of it in the concrete. As far as we know and can know, he will tell you, there is no Creator and no Ruler of the universe; as far as we are concerned, matter and energy can neither be created nor annihilated; for us, mind is a mode of energy, a function of the brain; all we know is that the material world is governed by immutable laws, and so forth. Thus, as far as he is a scientific man, as far as he knows anything, he is a materialist; outside his science, in spheres about which he knows nothing, he translates his ignorance into Greek and calls it agnosticism."

Thomas Henry Huxley (1825-1895) was the most typical representative of agnosticism and was the inventor of the word. Huxley, a pupil of Darwin, was one of the greatest of English biologists and did yeoman service in the wide diffusion of the principles of the modern physical and natural sciences. From 1860 to 1880, his writings were extremely popular in Russia, especially among "thoughtful realists." Two Russian translations of his *Evidence as to*

Man's Place in Nature were published in 1864. There was also a Russian translation of his *Lessons in Elementary Physiology* (1866), with a preface by D. Pisarev. (D. Ryazanov.)

“In his *Misère de la philosophie*, Marx expounds Hegel's dialectical method in the following terms:

“All that exists, all that lives on land and in water, exists, lives, only by some movement. Thus the movement of history produces the social relations, the industrial movement gives us the products of industry, etc.

“As by the force of abstraction we have transformed everything into a logical category, so we have only to make abstraction of all distinctive character of the different movements in order to arrive at movement in the abstract, movement purely formal, at the purely logical formula of movement. If in the logical categories is found the substance of all things, it might be supposed that in the logical formula of movement will be found the *absolute method* which not only explains everything, but which further implies the movement of things.

“It is of this absolute method that Hegel speaks in these terms: ‘Method is absolute force, unique, supreme, infinite, which no object can resist; it is the tendency of reason to find itself, to recognise itself, in everything.’ (*Logic*, Vol. III.)

“What, then, is this absolute method? The abstraction of movement. What is the abstraction of movement? Movement in the abstract. What is movement in the abstract? The purely logical formula of movement or the movement of pure reason. In what does the movement of pure reason consist? To pose, oppose and compose itself, to be formulated as thesis, antithesis and synthesis, or, better still, to affirm itself, to deny itself and to deny its negation.

“How does reason act, in order to affirm itself, to place itself in a given category? That is the affair of reason itself and its apologists.

“But once it has placed itself in thesis, this thesis, this thought, opposed to itself, doubles itself into two contradictory thoughts, the positive and the negative, the yes and no. The struggle of these two antagonistic elements, comprised in the antithesis, constitutes the dialectic move-

ment. The yes becoming no, the no becoming yes, the yes becoming at once yes and no, the no becoming at once no and yes, the contraries balance themselves, neutralise themselves, paralyse themselves. The fusion of these two contradictory thoughts constitutes a new thought which is the synthesis of the two. This new thought unfolds itself again in two contradictory thoughts which are confounded in their turn in a new synthesis. From this travail is born a group of thoughts. This group of thoughts follows the same dialectic movement as a simple category, and has for antithesis a contradictory group. From these two groups is born a new group of thoughts which is the synthesis of them.

"As from the dialectic movement of simple categories is born the group, so from the dialectic movement of the groups is born the series, and from the dialectic movement of the series is born the whole system.

"Apply this method to the categories of political economy, and you will have the logic and the metaphysics of political economy, or, in other words, you will have the economic categories, known to all the world, translated into an almost unknown language, which will give them the appearance of having been freshly hatched in a head of pure reason, so much do these categories seem to engender the one the other, to enchain and entangle the one in the other by the sole labour of the dialectic movement. . . . Thus for Hegel, all which has passed and which still passes is exactly that which passes in his own reasoning. Thus the philosophy of history is only the history of philosophy, of his own philosophy."

—*The Poverty of Philosophy*. (Chicago, Chas. H. Kerr and Co., 1920) pp. 116-118.

Speaking of this defect which underlies the Hegelian dialectic, Marx, in the preface to the second edition of *Capital*, emphasises the difference between materialist dialectic and idealist dialectic. He writes:

"My own dialectical method is not only fundamentally different from the Hegelian dialectical method, but is its direct opposite. For Hegel, the thought process (which he actually transforms into an independent subject, giving to it the name of 'idea') is the demiurge [creator] of the real; and for him the real is only the outward manifesta-

tion of the idea. In my view, on the other hand, the idea is nothing other than the material when it has been transposed and translated inside the human head. Nearly thirty years ago, when Hegelianism was still fashionable, I criticised the mystifying aspect of the Hegelian dialectic. Although in Hegel's hands dialectic underwent a mystification, this does not obviate the fact that he was the first to expound the general forms of its movement in a comprehensive and fully conscious way. In Hegel's writings dialectic stands on its head. You must turn it right way up again if you want to discover the rational kernel that is hidden away within the wrappings of mystification. In its mystified form, dialectic became the fashion in Germany because it seemed to elucidate the existing state of affairs. In its rational form it is a scandal and an abomination to the bourgeoisie and its doctrinaire spokesmen because, while supplying a positive understanding of the existing state of things, it at the same time furnishes an understanding of the negation of that state of things and enables us to recognise that that state of things will inevitably break up; it is an abomination to them because it regards every historically developed social form as in fluid movement, as transient; because it lets nothing overawe it but is in its very nature critical and revolutionary."

As regards the Hegelian law concerning the transformation of quantitative differences into qualitative differences, Marx refers to this in the first volume of *Capital*, in the chapter on the Rate and Mass of Surplus Value, where he is discussing the conditions under which the medieval guildmaster became a capitalist. "The owner of money or owner of commodities does not become metamorphosed into a real capitalist until the minimum amount advanced for production greatly exceeds the medieval maximum. Here, just as in the natural sciences, we find confirmation of the law discovered by Hegel in his *Logic* that, at a certain point, what have been purely quantitative changes become qualitative." (*Capital*, Vol. I, new translation, Allen and Unwin, London, 1928, p. 319.)

Pointing out the contradictions in which John Stuart Mill became involved through his attempt to reconcile Ricardo's theory of profit with Senior's theory of abstinence, Marx says: "Although the Hegelian doctrine of opposites, which is the main source of all dialectic, is un-

congenial to him, he [Mill] feels perfectly at home in the domain of flat contradiction." (*Ibid.*, p. 656, note 1.)

Elsewhere in *Capital*, Marx says that the properties of a thing do not arise out of its relations to other things, but are merely manifested in these relations. (D. Ryazanov)

⁵ Under date October 30, 1843, Marx wrote to Feuerbach a letter which is of great importance in its bearing on the development of the former's philosophical views. Urging Feuerbach to take up a position definitely opposed to Schelling, Marx says: "No one in the world can be better fitted than you to do this, for you are the exact opposite of Schelling. The perfectly sound idea which Schelling formulated in his youth (we must recognise the good there is in our opponents), for whose realisation he had no quality except imagination, no energy except vanity, no stimulant except opium, no instrument except the irritability of a purely feminine perceptive faculty; this sound idea of the days of his youth, this idea which in him remained a fantastic juvenile vision—this idea became transformed in you into truth, into reality, into something endowed with a virile seriousness. That is why Schelling is an anticipatory caricature of yourself; and as soon as we contrapose the reality to such a caricature, the latter must vanish like a mist-wraith. I therefore regard you as the adversary of Schelling, the necessary, natural adversary, endowed with plenipotentiary powers by Their Majesties Nature and History. Your struggle against him is the struggle of philosophy itself against a distortion of philosophy." (K. Grün, *Ludwig Feuerbach in seinem Briefwechsel und Nachlass*, Leipzig, 1874, Vol. I, p. 361.) It would seem that Marx considered that Schelling, in youth, had inclined towards materialist monism. Feuerbach, as his answer shows, did not share Marx's views in this matter. Feuerbach considered that Schelling, in his earlier writings, "merely transforms the idealism of thought into the idealism of imagination and attributes to things just as little reality as to the ego, with the only difference that this has a different aspect, seeing that, in place of the determinate ego, he has put the indeterminate absolute, and has given idealism a pantheistic complexion." (*Ibid.*, p. 402.)

⁶ This is shown even more clearly in that part of the *Deutsche Ideologie* published in the first volume of the

Marx-Engels Archiv. See *Marx und Engels über Feuerbach*, with my preface thereto. Here will also be found the revised text of the *Theses on Feuerbach*. (D. Ryazanov.)

⁷ Engels wrote: "The development of Feuerbach was the transformation of a Hegelian (in truth he had never been a perfectly orthodox Hegelian) into a materialist. At a certain phase in this development, Feuerbach broke away completely from his predecessor's idealist system. In the end there became irresistibly established in him a consciousness that the Hegelian premundane existence of the 'absolute idea,' the 'pre-existence of the logical categories' before the world came into being, was nothing more than a grotesque vestige of the belief in a supra-terrestrial creator; that the material world accessible to our senses, the world to which we ourselves belong, is the only real world; and that our consciousness and our thinking (however immaterial they may seem) are engendered by a material organ, a part of our body, the brain. Matter is not created by spirit, but spirit is itself merely the highest product of matter. Obviously this is pure materialism." (*Ludwig Feuerbach*, Stuttgart, 1907, pp. 17-18.)

⁸ F. Lange writes: "The genuine materialist will always be inclined to turn his gaze upon the great whole of external nature and to regard man as a wave in the ocean of the eternal movement of matter. The nature of man is to the materialist only a special case of universal physiology, as thought is only a special case in the chain of the physical processes of life." (*History of Materialism*, English translation, Vol. II, p. 248.) But Théodore Dézamy, likewise, in his *Code de la communauté* (Paris, 1842), sets out from human nature ("l'organisme humain"), although no one will doubt that he shares the outlooks of French eighteenth-century materialism. Moreover, Lange makes no mention of Dézamy, whereas Marx numbers that writer among the French communists whose communism was more scientific than Cabet's, for instance. "Dézamy, Gay and the other French communists of the same way of thinking developed materialist doctrine as a genuinely humanist doctrine and as the logical foundation of communism." (*Die heilige Familie*.) At the time when Marx and Engels wrote this book, they had not yet arrived at an agreement as to their appreciation of Feuerbach's philosophy. Marx spoke of that philosophy as "material-

ism coincident with humanism"; just as he considered that as Feuerbach is in theory, so French and English socialism and communism are in practice, materialism coincident with humanism. Speaking generally, Marx regarded materialism as the indispensable theoretical basis of communism and socialism. Engels, on the other hand, opined that Feuerbach had put an end once for all to the old opposition between spiritualism and materialism (*Die heilige Familie*.) Later, as we have seen, Engels came to recognise that in Feuerbach's development there had been an advance from idealism to materialism.

⁹ Already at this date, Feuerbach wrote the following remarkable words: "However much practical realism, the realism that scorns speculation, the realism embodied in the so-called sensualism and materialism of the British and the French, may be opposed to the spirit of Spinoza's work as a whole—none the less that realism has its ultimate foundation in the view of matter which Spinoza as metaphysician expressed in the famous proposition: 'Matter is an attribute of God.'" (Karl Grün, *Feuerbach*, Vol. I, pp. 324-325.)

¹⁰ In *Die heilige Familie*, Marx writes: "The Hegelian history of philosophy represents French materialism as the realisation of the Spinozan substance." (Especial stress was laid upon the Spinozism of Marx and Engels by the Marxist J. Stern, the German translator of Spinoza's *Ethics* and the author of a monograph upon Spinoza's philosophy.—D. Ryazanov.)

¹¹ "How do we cognise the outer world? How do we cognise the inner world? We have no different means for the one than for the other! Can I know anything about myself without the intermediation of the senses? Can I exist unless I exist outside myself, that is to say outside my thought? But how do I know that I exist? How do I know that I exist, not in my imagination, but in a way accessible to the senses, 'really'—unless I perceive myself through the intermediation of the senses?" (*Posthumous Aphorisms of Feuerbach*, in Grün's *Ludwig Feuerbach*, Vol. II, p. 311.)

¹² I wish to draw the reader's special attention to Engels' idea that the laws of external nature and the laws which regulate the bodily and mental life of man are "two groups of laws which, though in case of need they can

be separated in the imagination, can never be separated in reality." (*Anti-Dühring*.) Here we have the doctrine of the unity of being and thought, of object and subject—the doctrine mentioned in the text. As regards space and time, see the fifth chapter of the first part of the same book. We learn in this chapter that space and time were for Engels, as for Feuerbach, not only forms of contemplation (perception), but also forms of being.

¹³ Writing of his own philosophy, Feuerbach says: "My philosophy cannot be exhaustively expounded in pen and ink; there is no room for it on paper." But this phrase was only used by him in a theoretical sense. He says further on: "For this philosophy, the true is not that which has been thought, but that which has been seen, heard and felt, as well as thought." (*Posthumous Aphorisms, op. cit., Vol. II, p. 306.*)

¹⁴ Ernst Haeckel (1834-1919) was a famous German zoologist who did much to spread the idea of evolution in the natural sciences. In two books written for the general public, *The Riddle of the Universe* and *The Wonders of Life*, he developed his system of monism, which is one of the varieties of that naturalistic materialism concerning which Marx wrote that "the gaps in it manifest themselves in the abstract and ideological conceptions of its defenders as soon as they leave the domain of their specialised knowledge." (D. Ryazanov.)

¹⁵ On his return from his Siberian exile, Chernyshevsky published an article entitled "The Character of Human Knowledge." In this he wittily showed that a man who doubts the existence of the outer world must doubt his own existence. Chernyshevsky was a faithful disciple of Feuerbach, and the fundamental idea in his article can be summarised in the following words of Feuerbach's: "It is not because I distinguish myself from the things and the beings existing outside myself that I am distinct from them. I distinguish myself from them because I differ from them physically, organically, effectively. Consciousness presupposes being; it is only conscious being; it is only existence that is known and represented to oneself." (*Posthumous Aphorisms, op. cit., Vol. II, p. 306.*)

¹⁶ Feuerbach gave the name of "cud-chewers" to the thinkers who wanted to revive the elements of the old philosophy. Unfortunately there are still among us a great

many of these "cud-chewers." Both in Germany and in France they have created a vast body of literature; and now they are making their appearance in Russia as well. Plekhanov devotes to Bogdanov several articles which are reproduced in the collection entitled "From Defence to Attack"; and to Benedetto Croce, the Italian revisionist, an article in the collection entitled "Criticism of our Critics." In this latter collection will also be found the articles criticising Bernstein and Conrad Schmidt—*Works*, Vol. XVII and Vol. XI. (D. Ryazanov.)

¹⁷ Ernst Mach and his pupils take exactly the same course. They first transform sensation into a self-governing entity independent of the essence of the feeling body, an entity which they term an "element," and then they go on to say that this entity contains the solution of the contradiction between being and thought, between subject and object. This suffices to show how great is the mistake of those who declare that Mach is akin to Marx.

¹⁸ This explains the reserves always made by Feuerbach when he is speaking of materialism. For instance: "Short of this point, I am in full agreement with the materialists; beyond it, I am not." (*Posthumous Aphorisms*.) What he meant by this is plainly shown by the following words: "For my part, I also recognise the idea, but only in the domain of mankind, politics, morals; not in the domain of nature, the domain of physiology." (Grün, *op. cit.*, Vol. II, p. 307.) But whence come the idea of politics and the idea of morals? This question is not answered by the simple fact that we "recognise" the idea.

¹⁹ Furthermore, according to Feuerbach likewise, the "human essence" is created by history. Thus he says: "I only think as a subject educated by history, generalised, united to everything, to species, to the spirit of universal history. My thoughts do not have their beginning and their foundation directly in my special subjectivity; they are results; their beginning and their foundation are those of universal history itself." (Grün, *op. cit.*, Vol. I, p. 309.) Thus we already find in Feuerbach the germs of the materialist conception of history. In this respect, however, Feuerbach does not get beyond Hegel. (See my article, apropos of the sixtieth anniversary of the death of Hegel, in the collection entitled "Twenty Years"—

Works, Vol. VIII.) He even lags behind Hegel. With Hegel, he stresses the importance of that which the great German idealist philosopher called the "geographical foundation of universal history." He says: "The road which the history of mankind follows is obviously pre-determined, for man follows the road of nature as water runs in its channel. Men try to go where there is room for them, and they seek the place which suits them best. They settle down in a particular region, and they are conditioned by the place where they dwell. The essence of Hindustan is the essence of the Hindu. That which the Hindu is, that which the Hindu has become, is only the product of the sun, the air, the water, the animals and the plants of Hindustan. How could man, primitively, have originated from anything else than nature? Men, who adapt themselves to any kind of nature, are the offspring of nature, which, for its part, will not tolerate extremes." (*Posthumous Aphorisms*, Grün, *op. cit.*, Vol. II, p. 330.)

²⁰ Cf. *Misère de la philosophie*, Part II, first and second observations.—I must point out that Feuerbach, too, criticised the Hegelian dialectic from a materialist standpoint. "What is a dialectic which is in conflict with the origin and the evolution of nature? What is its 'necessity'? What is the 'objectivity' of a psychology, of a philosophy which ignores the one and only categorical imperative, fundamental and solid objectivity, the objectivity of physical nature, and which actually posits absolute truth, the perfection of mind, the ultimate aim of philosophy, in complete separation from physical nature, in absolute subjectivity, in subjectivity not restricted by any 'non-ego' of Fichte, by any 'thing-in-itself' of Kant?" (Grün, Vol. I, p. 399.)

²¹ "Notwithstanding all its gradualness, the passage from one kind of motion to another is always a sudden, always a decisive change. Of such a kind are the passage from the mechanics of the heavenly bodies to that of the smaller masses upon a single star; and the passage from the mechanics of masses to that of molecules, a mechanics which comprises the movements we study in the domain of the science of physics—heat, light, electricity and magnetism. In like manner, the passage from the physics of molecules to that of atoms (chemistry) is achieved suddenly; and this is still more true as regards the transition

from ordinary chemical action to the chemical action of albumen, the chemical action which we term life. It is not until a later stage, within the sphere of life, that sudden changes become rarer and are less and less in evidence." (Engels, *Anti-Dühring*.)

²² Plekhanov attributes undue importance to the work of De Vries. It will be interesting, therefore, to compare with what is said in the text the opinion of one of the greatest botanists of the nineteenth century, Professor Timiryazev, a thoroughgoing Darwinian, who regards De Vries's work as one of a number of endeavours to reduce the value of Darwinism. Timiryazev writes:

"One of De Vries's assertions demands attention. De Vries claims that he has succeeded in discovering the true process of the formation of new species. According to him, this process does not consist in a gradual transformation occurring under the influence of definite conditions, but proceeds by sudden changes, as the outcome of an unknown internal cause. De Vries is perfectly well aware that the adaptations of organisms cannot be explained by these sudden changes. He recognises that Darwinism can alone explain this fundamental peculiarity of organisms. He therefore formulates his position with regard to Darwinism as follows: Natural selection does not bring about the origin of species but the destruction of species that are not properly adapted to the environment. The distinction between the two theories is not very great. Even under this form, it turns upon a play on words, the term 'species' being taken in two entirely different senses. When Darwin published his book *The Origin of Species*, he was thinking of 'good' species as generally recognised, in the sense of Linnaeus. It was not until after Darwin's book had appeared, that Alexis Jordan, the French botanist, pointed out that within the limits of the generally accepted species there were to be found smaller groups which had the same stability as that which was generally considered to be the distinctive mark of a species. On this ground, biologists have come to speak of 'Jordan's species' and of 'Jordanism,' to denote the tendency to replace the older grouping into species by a classification into smaller groups. It is to these new species, which were unknown at the time when Darwin published his book, that De Vries's formula

applies. It should be borne in mind that the phenomenon in question had not escaped Darwin's notice. He referred to the simultaneous existence of varieties which obviously had not disappeared in consequence of crossing and shared the stability of species. In other words, Darwin recognised the existence of what, since Jordan's day, have been called "minor species," though in Darwin's time these minor species were considered to be varieties. It follows that what Darwin and Darwin's contemporaries spoke of as varieties are spoken of by De Vries as species, in the post-Jordanian sense of the term. Hence he infers that selection does not give rise to new species but only suppresses extant species which are not properly adapted. However this may be, De Vries, like Darwin, can find no other explanation than selection to account for the transformation of species. He cannot dispense with that principle, for he understands the difference between simple variability and adaptation. One cannot say as much of Korzhinsky. Having at one time been a fanatical Darwinian, he suddenly became a pronounced anti-Darwinian and believed himself to have thought out a theory that would give the death-blow to Darwinism, whereas in reality he had merely succeeded in lengthening (thanks to the amount of material accumulated in the last forty years) the list of instances of extensive and sudden changes to so many of which Darwin had drawn attention in his books. Thus Korzhinsky did not understand the difference between simple change and adaptation, this meaning that he did not understand the central feature of Darwinism. I should also add that the endeavours of De Vries, Korzhinsky and others have added nothing to Darwin's fundamental conceptions, even as concerns the question of variability, which is but a part of Darwinism. Darwin himself likewise recognised the occurrence of brusque changes, of changes by jumps, as well as gradual changes; but there is no reason to-day, any more than there was in Darwin's time, to assign to sudden changes, I will not say exclusive value, but even a predominant value." (K. Timiryazev, *The Fundamental Characteristics of the Development of Biology during the Nineteenth Century*, Moscow, 1908, pp. 94-96.)

In this connection, I should add that Armand Gautier, who is mentioned by Plekhanov, is probably mentioned by mistake for Alexis Jordan. Gautier is a distinguished

chemist, so that he works in quite a different field. His researches prove the unity of organic and inorganic matter.

Professor L. S. Berg, one of the most recent advocates of the theory of the evolution of species by jumps, admits that "the foundations of the theory of Korzhinsky and De Vries have proved extremely unstable." (*The Theory of Evolution*, Petrograd, 1922.) But this author, in his big book entitled *Monogenesis, or Evolution in accordance with Natural Laws*, Petrograd, 1922, continues to ignore Timiryazev's counter-arguments; and, wishing to prove that evolution proceeds "by jumps, paroxysms, mutations," he leaves out of consideration Darwin's amendments to his own doctrine. Just as in the writings of Korzhinsky and Danilevsky, we see in those of Professor Berg a determination to reintroduce into science, under cover of a concern for "regular" evolution, the principle of the "primary teleology of all living matter.."

Nowadays Plekhanov could have referred to Planck's theory of quanta, for the latter has introduced the idea of sudden changes into the domain of electromechanical processes. This "quantum" itself, the element of energy, is a qualitative difference resulting from quantitative changes. Just as there must be a certain accumulation of money, a quantitative transformation of money, in order to obtain the minimum, the "quantum," necessary for the transformation of this money into capital—so, according to Planck's theory, there must be an accumulation of electrical energy, a quantitative transformation, until we obtain a "quantum," an amount of energy that will produce an appreciable effect. This theory can easily be assimilated to that of evolution by sudden changes, and Planck himself assimilates it thus. He criticises the thesis of the "continuity of dynamic processes" which was in former days the undisputed premise of all physical theories, which, in conformity with Aristotle, found expression in the formula: "Natura non facit saltus" (Nature makes no jumps).

Planck writes: "But even in this stronghold, always respected from ancient times, modern research has made an appreciable breach. . . . Recent discoveries have shown that the proposition [that nature makes no jumps] is not in agreement with the principles of thermodynamics, and, unless appearances are deceptive, the days of its validity are

numbered. Nature certainly seems to move in jerks, indeed of a very queer kind. . . . In any case, the quantum hypothesis has given rise to the idea that in nature changes occur which are not continuous but of an explosive character." (*Physikalische Rundblicke*, 1922, pp. 72-75; English translation; *A Survey of Physics*, Methuen, London, 1925, pp. 78-81.)

From the outset Marx's dialectic synthesised gradual evolution with the theory of catastrophes, the theory of jumps. For the Marxian dialectic, these catastrophes are an indispensable factor in the dialectical process. Herein lies the main difference between dialectic and evolution.

Every advance in the knowledge of nature brings fresh proofs of the fact that everything is in movement, that everything is in course of evolution. The latest advances in physics and chemistry have shown that motion, life, is no less characteristic of the world of chemical elements, formerly supposed to be inert, but now known to be evolving, to be subject to transformations just as organisms are. Everything lives and moves; everything is undergoing a process of eternal, dialectical, transformation. Cf. Engels' *Dialektik und Natur*, in the Marx-Engels Archives, Vol. II, (D. Ryazanov.)

²³ Napoleon I said: "The nature of weapons decides the composition of armies, the theatres of war, marches, positions, camps, orders of battle, the situation and construction of fortresses. Thus there is a continuous opposition between the ancient system of war and the modern." (*Précis des guerres de César*, Paris, 1836, pp. 87-88.)

²⁴ The most important work bearing on this topic published since Plekhanov's book was written is *La géographie humaine*, by the French geographer Brunhes, which appeared in the year 1910. There is also a Russian study of the evolution of anthropo-geographical ideas by L. Sinitsky, published in 1908. Among the German geographers who have studied the influence of the geographical environment on man and, conversely, the influence of man upon the geographical environment, the most remarkable is that of Hettner. We have to thank the same writer for a condensed exposition of the geographical conditions affecting human economics in the symposium entitled *Grundriss der Socialökonomik*, 1914, to which Hettner contributes an essay entitled *Die geographischen Bedingungen der men-*

schlichen Wirtschaft. Nikolai Bukharin draws upon Hettner in his book *Historical Materialism*, "Nature as the Environment for Society," see the English version, Allen and Unwin, London, 1926, p. 106. (D. Ryazanov.)

²⁵ It is characteristic that, in an early work on the economic theory of Rodbertus, Plekhanov drew attention to this question of the role of conquest. In Plekhanov's view, Rodbertus had not yet got beyond the philosophy of history which, in the opening decades of the nineteenth century, endeavoured, speaking through the mouth of Augustin Thierry, to explain the course of English history by the fact that "there had been a conquest," that "all this dates from a conquest." Plekhanov sketches the essentials of his refutation in the following way: "The writings of Thierry suffice to show all the inconsistency, all the bankruptcy, of such an outlook. Even if it still retains a semblance of probability when we have only to do with the 'statics' of a given social regime, the theory of force is incapable of explaining the stages through which this regime passes in its evolution, incapable of discovering the causes which transform the relations of social forces." (*Works*, Vol. I, pp. 38-40.)—(D. Ryazanov.)

²⁶ John Stuart Mill, repeating the words of "one of the greatest thinkers of our epoch," wrote: "Of all the commonplace ways of trying to escape the need for studying the action which social and moral influences exercise upon the human mind, the most commonplace is that which ascribes differences of outlook and of character to innate natural differences." (*Principles of Political Economy*.)

²⁷ As regards the influence of economics upon social relations, and in especial on law, I may draw attention to the works of N. I. Sieber, which have retained all their value. First of all, let me mention his *Sketches of Primitive Economic Civilisation*, 1883, re-edited in 1899, and, next, his articles collected under the title "Law and Economics" in the second volume of his *Works*, St. Petersburg, 1900. (D. Ryazanov.)

²⁸ Ludwig Noiré (1829-1889), a German philosopher who is almost entirely ignored by professional historians of philosophy, in one of his first works (*Der monistische Gedanke*, 1875), defended a monism akin to Spinozism. He sets out from the unity of matter and spirit. Two

other works by him may be mentioned. One of them, quoted by Plekhanov, published in 1874, deals with the origin of language; the other, which is no less interesting, discusses the importance of tools (*Das Werkzeug und seine Bedeutung für die Geschichte der Menschheit*, 1880).—(D. Ryazanov.)

²⁹ I may refer to an article of my own [So-called Religious Trends in Russia], which was published in the September and November issues of the review, "Sovremionny Mir" for the year 1908 (*Works*, Vol. XVII). Therein I examine the importance of technique in the evolution of religious ideas.

³⁰ A recent endeavour to expound the evolution of civilisation from a materialist point of view will be found in the unfinished work by the German sociologist Müller-Lyer, *Entwicklungsstufen der Menschheit* (1908-1914), posthumously re-issued in seven volumes, 1923-1924. The volume entitled *Phasen der Kultur* has been published in English translation by Allen and Unwin (London, 1920) under the title *The History of Social Development*.

To art, considered from the point of view of the materialist conception of history, Plekhanov has devoted a special article, entitled *Art*, reproduced in the collection "Twenty Years," pp. 334-354 (*Works*, Vol. XIV).

Of late years the question of the origin of art has been studied from a Marxian point of view by Wilhelm Hausenstein, *Die Kunst und die Gesellschaft*, Munich, 1916, and by Lu Märten, *Das Wesen und die Veränderung der Künste*, 1920. Cf. also Bukharin's *Historical Materialism*, English translation, Allen and Unwin, London, 1926, pp. 196-203. (D. Ryazanov.)

³¹ It is well known that in the autumn of 1905 certain Russian Marxists held other views. They considered that a socialist revolution was possible in Russia, on the ground that the productive forces of that country were sufficiently developed for such a revolution.

³² Engels, in his book on the origin of the family, declared that purely hunting peoples existed only in the imagination of sociologists. Hunting tribes, he said, were also engaged in the cultivation of fruits and vegetables. Still, as we have seen, the chase exercises a considerable

influence upon the development of the ideas and tastes of these races.

³³ These ideas have been developed by Plekhanov in more detail in his article *French Dramatic Literature and French Painting during the Eighteenth Century, considered from a Sociological Outlook*, reproduced in the collection "Twenty Years" (*Works*, Vol. XIV).

"To say that art, like literature, is a reflection of life, is to express a thought which, however true it may be, is still extremely vague. To understand the way in which art reflects life we must understand the mechanism of life. But it is certain that, among civilised peoples, the class struggle is one of the most important motive forces of this mechanism. Not until we have examined this motive force, not until we have considered the class struggle and studied all its multiform effects, shall we be in a position to give the first beginnings of a satisfactory explanation of the 'spiritual' history of civilised society. The 'march of ideas' of this society reflects the history of the classes of which it is made up and of the struggles between these classes." "Twenty Years," pp. 323-324. (*Works*, Vol. XIV.)

As regards the causes which led to the success of David's paintings, see the same volume, pp. 317-319.

W. Hausenstein, a German historian of art, has published several works on the same topic. (D. Ryazanov.)

³⁴ In his polemic against the brothers Bauer [*Holy Family*], Marx wrote: "Advanced French philosophy, and more especially the French materialism of the eighteenth century, was a struggle, not only against extant religion and theology, but also against seventeenth century metaphysics (and against metaphysics in general), against the metaphysics of Descartes, Malebranche, Spinoza and Leibniz, and at the same time 'against extant political institutions.'" To-day this is universally recognised.

³⁵ This reference to Sismondi is already to be found in Plekhanov's well-known article *A Few Words in Defence of Economic Materialism*, an open letter to V. Goltsev (reproduced in the collection "Twenty Years.") (*Works* Vol. VIII.)

According to Sismondi, "in France, under the reign of Philip V, the French romance writers, whose works in

those days formed the only reading at the court and in the castles, modified national manners by showing the nobility at what ideals they ought to aim in order to attain perfection." Literature influenced manners. But whence did this literature itself derive? To what did the romances of chivalry owe their existence? The answer is obvious. The romances of chivalry owed their existence to the manners and customs of the days of chivalry. (D. Ryazanov.)

³⁶ Spinoza had already said (*Ethics*, Part III, Proposition 2, Scholium) that many persons believe themselves to act freely, and they do this because they know their actions while they do not know the causes thereof. "Thus the infant believes that it is by free will that it seeks the breast; the angry boy believes that by free will he wishes vengeance; the timid man thinks it is with free will he seeks flight." (W. H. White's translation.) The same thought was uttered by Diderot, whose materialist doctrine was a Spinozism stripped of its theological trappings.

